

# A Study on Perception of Lawyers about the Impact of Artificial Intelligence on the Legal Profession

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## **Abstract**

The legal sector is one of the biggest sectors in the world. The operations of the legal sector are supposed to be under-digitized. The legal profession is cautious about embracing new technologies and takes a rather traditional approach to its work

Artificial Intelligence (AI) has the potential to significantly advance and improve India's legal system. Although AI is still being adopted in its infancy in the Indian legal system, there are several domains in which it can be advantageous. With the advancement of AI technology, lawyers will be able to practice more strategically, work more efficiently, and spend less money. Even while there are worries that artificial intelligence (AI) may endanger attorneys, AI technology can enhance legal research and analysis, speed up processes, increase access to justice, and enhance the practice of law overall.

This study investigates the benefits of incorporating artificial intelligence technology into the legal field and looks at how legal professionals view this use of technology. The study was conducted by using Primary data collected from the 106 lawyers practising in the City of Mumbai. The analysis was done by using simple frequency, percentages, Mann-Whitney Test and Kruskal Wallis test by using SPSS software. It was found that there is no significant association between gender and perception of lawyers about artificial intelligence and there is significant association between age and perception of the lawyers about artificial intelligence.

**Keywords-** Lawyers, technology, justice, efficiency, legal field

## **1. Introduction**

Artificial intelligence is transforming human labour, education, and productivity. Through the automation of repetitive tasks and the development of innovative solutions, these technologies are helping professionals across a wide range of disciplines and industries to achieve more with less.

Globally Artificial intelligence is being used in the legal sector to help with contract drafting, predict court cases, and even advise judges on different matters.

AI has the potential to alter how legal services are produced and consumed. There's this threat that this will undermine client confidence in lawyers, displace lawyers entirely, and alter the regulatory landscape overall, but it could also result in enhanced efficacy, transparency, and personalization of services.

AI has real assistances in the legal field. It can help to minimize errors and increase the output of lawyers. Artificial Intelligence makes it easier to produce outcomes for agreement evaluations and legal research.

However, what effect does AI have on the legal sector? What difficulties do the lawyers encounter when implementing these technologies? How many lawyers are actually aware about existence of AI in the legal field? These and some other questions were in the mind of lawyers.

Therefore, an attempt has been made to investigate how lawyers view the impact of artificial intelligence on the legal sector.

## 2. *Review of Literature*

- Patel Khushi & Gandhi Aahini explored the influence and future scope of incorporating AI-assisted legal research tools. The paper also understands the relationship between legal education and legal research in light of adopting new practices and the necessity of incorporating AI-led and assisted education in law school curriculums.
- Dr. Kaur Inderpreet and (Late) Mr. Puri Chander Gopal have discussed the Benefits of artificial intelligence in the legal profession sector. According to them. Artificial intelligence has transformed every professional sector including the legal profession. The Legal issues with artificial intelligence and the Impact of artificial intelligence on the Indian legal industry have been studied by the researcher.
- Chay Brooks, Cristian Gherhes, Tim Vorley, have studied Recent technological developments in automation and artificial intelligence promise to disrupt the very foundations of how legal work is practiced and delivered. The findings reveal important cultural and structural challenges that hamper transformation
- Atrey, Ishan, stated that Artificial Intelligence (AI) is gaining popularity among people as it is able to solve many real-world problems first. This study presents how AI can help make law enforcement more effective and efficient. The present paper explores the Legal personality of AI, privacy issues, benefits and drawbacks of AI and Law.

## 3. *Statement of the Problem*

AI automation raises concerns about economic displacement and job loss because it has the potential to replace some job roles. Some legal professionals may lose their jobs as a result of task automation, especially those whose work entails routine and repetitive tasks. This can necessitate retraining for impacted individuals or a shift to new roles, which can be extremely difficult for some. Due to their lack of experience with new technology, worries about their job security, or preference for more conventional approaches, some legal professionals may be reluctant to embrace AI technologies.

### *Objectives of the Study*

1. To study the perception of Lawyers about the impact of Artificial Intelligence on the Legal Profession.
2. To analyse the association between the perception of Lawyers about Artificial Intelligence and their demographic profile.

## 4. *Hypothesis*

1. There is no significant association between the gender of the lawyers and their perception about AI.
2. There is no significant association between the age of the lawyers and their perception about AI.

**5. Research Methodology**

Gender wise Classification of the Respondent		
Gender	Frequency	Percentage
Male	77	72.60
Female	29	27.40
<b>Total</b>	<b>106</b>	<b>100</b>

The researcher has used both qualitative and quantitative research methods. It deals with the literature relating to the usage of Artificial intelligence in the legal industry. For this research, the target population was the lawyers working in Mumbai. The non-probability sampling technique has been used as a research tool, the sub-techniques: judgemental & and convenience sampling were used for the study.

The researcher approached 106 such respondents. For data collection, the researcher has adopted the Questionnaire method.

**6. Significance of the Study**

The study will help us to understand the perception of lawyers about artificial intelligence among Legal professionals. It will also help to analyse the association between the perception of Lawyers about Artificial Intelligence and their demographic profile

**7. Limitations of the Study**

The study does not cover the entire population of lawyers in Mumbai. Study has been conducted only on the basis of few respondents in Mumbai. The results need to be generalized with caution and may not be entirely valid for population of other cities of the country.

**8. Descriptive Analysis of Data of the Present Study**

The researcher has made attempt to study some of the demographics of the Lawyers and its association with the perception of lawyers about use of AI in legal field. The researcher has taken into consideration the demographic profiles of individual such as age, gender which may have considerable relation with their perception of effect of AI in legal field

**Table 9.1: Gender and age-wise Classification of the Respondent**

Age wise classification of the Respondent		
Age	Frequency	Percentage
20-30	30	28.30
30-40	40	37.70
41-50	18	17.00
51-60	9	8.50
Above 60	9	8.50
<b>Total</b>	<b>106</b>	<b>100.00</b>

Source: Compiled from Primary Data

The distribution of sample according to gender is presented in the above figure. This shows that 72.60 per cent of the respondents are male and 27.40 per cent are female respondents. Thus, the sample is dominated by male respondent but a good representation of women is also seen.

The age wise classification of the respondents reveals that the highest i.e. 37.70 percentage of the respondents belong to age group of 30-40. The second highest age group (28.30 per cent) is between the age of 20-30. The respondent between the age group of 41-50 constitute 17.00 per cent. Thus, the sample is representative of all various age.

**Table 9.2: Perception of Lawyers about impact of AI in legal work**

Perception of Lawyers about impact of AI in legal work					
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
AI will cause threat to lawyers	8.49	66.98	24.53	0.00	0.00
AI is Trustworthy	25.47	57.55	15.09	0.94	0.94
Data is safe when using AI	22.64	63.21	12.26	0.94	0.94
AI is costly	0.00	27.36	44.34	16.98	11.32
AI will lead to radical change in legal field	6.60	52.83	34.91	2.83	2.83
AI interferes with my privacy	0.00	16.04	15.09	37.74	31.13
AI cannot replace the expertise and judgement of human lawyers	45.28	22.64	17.92	11.32	2.83
AI should be incorporated in law school curriculum	28.30	52.83	10.38	8.49	0.00
There should be legal framework for regulating AI in legal field	55.66	23.58	12.26	2.83	5.66

Source: Compiled from Primary Data

- Computers are empty vessels that humans have loaded with data so they can operate in society, but they lack morality or ethical convictions. When questioned about respondents' perceptions of AI's reliability. A significant majority of respondents i. e. 83.02 percent feels that AI was trustworthy; only 1.88 percent disagreed with this statement, and 15.09 percent were neutral.
- Handling sensitive legal information using AI raises concerns about data security and the potential for unauthorized access or malicious use. 85.85 percent of the lawyers felt that their data is safe while using AI.
- Only 27.36 percent of the Respondent agrees that implementing AI is very costly while 44.34 percent are neutral about it while 28.30 percent feels that AI is not costly. This could be because practicing law necessitates a large investment in infrastructure, training, and technology.
- 75.47 percent of Respondent believe that AI will cause threat to lawyers as Artificial intelligence can help with many legal tasks. But human judgment and oversight are still essential. Human judges should make the final decisions and judgements, making sure that context, subjectivity, and ethical considerations are duly taken into account. Therefore 67.92% of attorneys think AI cannot take the place of human knowledge and expertise.
- For implementation to be successful, legal professionals must receive the appropriate training and education. Eighty-six percent of lawyers believe artificial intelligence should be taught in law schools. Just 8.49 percent of respondents are against the idea of including AI in the curriculum for law schools, while 10.38 percent are neutral.

- Unlike qualified attorneys, artificial intelligence systems are not bound by professional codes of conduct and ethical standards since they are not required to obtain a license in order to practice law. Who will be held accountable or liable if an AI system produces false or deceptive legal advice? A legal framework must be established in order to regulate AI. 79.24 % of attorneys concur with this assertion.
- Only 16.04 percent of the respondents feels that AI interfere with the privacy of the Respondent while majority of the respondent (68.87) do not feel that AI interfere with the privacy of the respondent.

## 9. Hypothesis testing

### Hypothesis 1

H<sub>0</sub>: There is no significant association between the gender of the lawyers and their perception about AI.

H<sub>1</sub>: There is a significant association between the gender of the lawyers and their perception about AI.

### Mann-Whitney Test

Grouping Variable (Gender) measured with perception of lawyers about Artificial Intelligence

Table 9.3a: Ranks				
	Gender	N	Mean Rank	Sum of Ranks
AI will cause threat to lawyers	Male	77	56.18	4325.50
	Female	29	46.40	1345.50
	Total	106		
AI is Trustworthy	Male	77	52.84	4068.50
	Female	29	55.26	1602.50
	Total	106		
Data is safe when using AI	Male	77	51.35	3954.00
	Female	29	59.21	1717.00
	Total	106		
AI is costly	Male	77	48.16	3708.50
	Female	29	67.67	1962.50
	Total	106		
AI will lead to radical change in legal field	Male	77	51.25	3946.00
	Female	29	59.48	1725.00
	Total	106		
AI interferes with my privacy	Male	77	50.33	3875.50
	Female	29	61.91	1795.50
	Total	106		
AI cannot replace the expertise and judgement of human lawyers	Male	77	51.25	3946.00
	Female	29	59.48	1725.00
	Total	106		
AI should be incorporated in law school curriculum	Male	77	54.53	4199.00
	Female	29	50.76	1472.00
	Total	106		

There should be legal framework for regulating AI in legal field	Male	77	56.14	4323.00
	Female	29	46.48	1348.00
	Total	106		

Source: Compiled from Primary Data

**Table 9.3b: Test Statistics<sup>a</sup>**

	AI will cause threat to lawyers	AI is Trustworthy	Data is safe when using AI	AI is costly	AI will lead to radical change in legal field	AI interferes with my privacy	AI cannot replace the expertise and judgement of human lawyers	AI should be incorporated in law school curriculum	There should be legal framework for regulating AI in legal field
Mann-Whitney U	910.500	1065.500	951.000	705.500	943.000	872.500	943.000	1037.000	913.000
Wilcoxon W	1345.500	4068.500	3954.000	3708.500	3946.000	3875.500	3946.000	1472.000	1348.000
Z	-1.959	-.555	-1.940	-3.094	-1.422	-1.814	-1.492	-.827	-2.039
Asymp. Sig. (2-tailed)	.050	.579	.052	.002	.155	.070	.136	.408	.041

a. Grouping Variable: Gender

Source: Compiled from Primary Data

**Inference:**

The above table exhibits gender of the respondents measured with perception of the lawyers about artificial intelligence by using Mann-Whitney non – parametric test. It was observed that most of the attributes have P value greater than the significance value 0.05.

Therefore, researcher retains the null hypothesis and there is no significant association between gender and perception of lawyer about artificial intelligence.

**Hypothesis 2**

H<sub>0</sub>: There is no significant association between the age of the lawyers and their perception about AI.

H<sub>1</sub>: There is a significant association between the age of the lawyers and their perception about AI.

<b>Table 9.4a: Kruskal-Wallis Test</b>		Ranks	
	Age	N	Mean Rank
AI will cause threat to lawyers	20-30	30	43.53
	31-40	40	65.18
	41-50	18	40.00
	51-60	9	66.50

	Above 60	9	48.83
	Total	106	
AI is Trustworthy	20-30	30	58.70
	31-40	40	61.19
	41-50	18	53.75
	51-60	9	45.00
	Above 60	9	10.00
	Total	106	
Data is safe when using AI	20-30	30	57.03
	31-40	40	59.70
	41-50	18	61.00
	51-60	9	43.67
	Above 60	9	9.00
	Total	106	
AI is costly	20-30	30	39.33
	31-40	40	58.99
	41-50	18	50.83
	51-60	9	79.33
	Above 60	9	55.83
	Total	106	
AI will lead to radical change in legal field	20-30	30	56.03
	31-40	40	63.75
	41-50	18	46.67
	51-60	9	41.67
	Above 60	9	25.00
	Total	106	
AI interferes with my privacy	20-30	30	49.12
	31-40	40	58.10
	41-50	18	39.92
	51-60	9	60.00
	Above 60	9	68.33
	Total	106	
AI cannot replace the expertise and judgement of human lawyers	20-30	30	58.33
	31-40	40	62.51
	41-50	18	55.33
	51-60	9	32.50
	Above 60	9	14.67
	Total	106	
AI should be incorporated in law school curriculum	20-30	30	57.03
	31-40	40	58.65
	41-50	18	63.50
	51-60	9	27.83

	Above 60	9	24.50
	Total	106	
There should be legal framework for regulating AI in legal field	20-30	30	64.50
	31-40	40	59.65
	41-50	18	56.42
	51-60	9	23.83
	Above 60	9	13.33
	Total	106	

Source: Compiled from Primary Data

**Table 9.4b: Test Statistics<sup>a,b</sup>**

	AI will cause threat to lawyers	AI is Trustworthy	Data is safe when using AI	AI is costly	AI will lead to radical change in legal field	AI interferes with my privacy	AI cannot replace the expertise and judgement of human lawyers	AI should be incorporated in law school curriculum	There should be legal framework for regulating AI in legal field
Chi-Square	25.583	52.077	62.580	16.010	19.540	8.273	33.560	38.134	58.652
Df	4	4	4	4	4	4	4	4	4
Asymp. Sig.	.000	.000	.000	.003	.001	.082	.000	.000	.000

a. Kruskal Wallis Test

b. Grouping Variable: Age

Source: Compiled from Primary Data

**Inference:**

The table exhibits grouping variable age of the respondents measured with the perception of the lawyers by using the Kruskal Wallis Test which is nonparametric test. It shows that all attributes (except one) have p value less than a significant value of 0.05. Therefore, the null hypothesis gets rejected and there is a significant association between age and perception of the lawyers about artificial intelligence.

**Conclusion**

In conclusion, the Indian legal system may benefit from the application of AI in terms of increased effectiveness, better access to justice, and support for decision-making procedures. To ensure a fair and balanced integration of AI technology in the Indian legal sector, however, careful consideration must be given to infrastructure, the role of human judgment, ethical implications, and data quality. Legal professionals and educators must embrace these technological developments and adjust to the shifting legal industry landscape as artificial intelligence (AI) continues to grow.



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