DEFRAGMENTATION OF INDIAN LEGAL CASES WITH SPECIFIC REFERENCE TO CONSUMER PROTECTION ACT USING KNOWLEDGE BASED SYSTEM

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\textbf{ABSTRACT}

The main aim of this research paper is to develop a rule based knowledge database for legal expert system for consumer protection act, a domain within the Indian legal system which is often in demand. A knowledge database developed here will further help the legal expert system to determine type of case with respect to the Indian Judicial System. In this paper a rule based knowledge database will be developed to determine the type of the case. The main aim of the study is to build a prototype which will rule based in nature. The rule based knowledge database development is the first phase in the development of comprehensive rule based legal expert system for consumer protection act which will be of great help in process of solving consumer related cases.

\textbf{KEYWORDS}

Consumer Case, Consumer Protection Act, Indian Legal Domain, Knowledge Based System, Rule Based System.

\textbf{1. INTRODUCTION}

A Knowledge Based Legal Expert Systems or rule based knowledge expert system whose aim is merely to provide advice and guidance to the user and not autonomously to provide reasoned solutions is essentially a Knowledge Based System. Research on this topic is being done in numerous organizations all over the world, from higher education laboratories to research institutes and software development organizations. The decades of 80’s and 90’ saw great use of Knowledge Based Systems, but in last decade the use of Knowledge Based system has been less or that it is embedded with other technologies. The research on legal expert system is important and significant as it will provide a common man with a representation of the Legal world in a form, which he/she can easily understand.

\textbf{1.1. Knowledge Based Expert System}

Expert systems increase the probability, frequency, and consistency of making good decisions; facilitate real-time, low-cost expert-level decisions by the non-expert and thus free up their mind and time to enable him or her to concentrate on more creative activities. Although the expert system technology has progressed substantially, it would be a mistake to overestimate the abilities of the technology, as it also serves us with a some deficiency like expert system lacked casual knowledge of the causes and effects in a system and hence they are unable to generalize their knowledge in order to reason about new situations in the way that people can. Expert system
contains knowledge and experience gleaned from human experts of the domain. The program asks users series of questions about their problem and gives them advice based on its store of knowledge and responses received from user against the queries made. The system developed here is rule based system and has following four functional modules like other rule based systems:

(i) Knowledge base (ii) Inference Engine (ii) Explanation facilities (iv) user Interface. The functional flow and organization of these modules is shown in Figure 1. The development of ES requires creation of this entire module.

![Figure 1: Structure of a Rule based expert system](image_url)

1.2. The Consumer Protection Act,1986

The industrial revolution and the development in the international trade and commerce has led to the vast expansion of business and trade, as a result of which a variety of consumer goods have appeared in the market to cater to the needs of the consumers and a host of services have been made available to the consumers like insurance, transport, electricity, housing, entertainment, finance and banking. A well organized sector of manufacturers and traders with better knowledge of markets has come into existence, thereby affecting the relationship between the traders and the consumers making the principle of consumer sovereignty almost inapplicable. The advertisements of goods and services in television, newspapers and magazines influence the demand for the same by the consumers though there may be manufacturing defects or imperfections or short comings in the quality, quantity and the purity of the goods or there may be deficiency in the services rendered. In addition, the production of the same item by many firms has led the consumers, who have little time to make a selection, to think before they can purchase the best. For the welfare of the public, the glut of adulterated and sub-standard articles in the market has to be checked. In order to provide for better protection of the interests of the consumer the Consumer Protection Bill, 1986 was introduced in the Lok Sabha on 5th December, 1986. An Act to provide for better protection of the interests of consumers and for that purpose to make provision for the establishment of consumer councils and other authorities for the settlement of consumers’ disputes and for matters connected therewith.
2. **Defragmentation Of Indian Legal Cases**

There are different types of cases in legal domain, among them any cases can be broadly divided among criminal, civil or consumer case. As objective of this research work is to develop an expert system for Consumer Protection Act, hence it mainly focuses consumer related cases and the expert system will help to solve consumer related cases. So first of all we have to classify the cases in order to proceed further.

3. **Methodology To Generate Knowledge Base For Consumer Case**

According to Indian Law cases can be criminal, civil or consumer related. Hence it is necessary to develop a Knowledge Database to differentiate the cases accordingly. So the first level knowledge database is generated in order to defragment the cases. The first level Knowledge Database consist of YES/NO questions, according to their answers we can differentiate the case as civil, criminal or consumer related case.

**KNOWLEDGE DATABASE-1(KDB-1):** Defragmentation of different types of cases on the basis of YES/NO questions:

1. Is case is related to dowry?
2. Is case is related to robbery?
3. Is case is related to violence against /woman/sexual offence/ rape?
4. Is case is related to cheque bounce?
5. Is case is related to self/private defence?
6. Is case is related to abatement (encouraging for crime)?
7. Is case is related to murder?
8. Is case is related to criminal conspiracy?
9. Is case is related to any offence against state?
10. Is case is related to public nuisance?
11. Is case is related to false evidence?
12. Is case is related to any offence related to coins & government stamps?
13. Is case is related to miscarriage of unborn child?
14. Is case is related of hurt?
15. Is case is related to kidnap, abduction, slavery or forced labor?
16. Is case is related to fraud/cheating matter?
17. Is case is related to criminal trespass?
18. Is case is related to criminal force assault?
19. Is case is related to divorce?
20. Is case is related to service issue (Government/Private)?
21. Is case is related to possession of property?
22. Is case is related to recovery of money?
23. Is case is related to succession issue?
24. Is case is related to execution of order?
25. Is case is related to compensation claim?
26. Is case is related to postal services?
27. Is case is related to railway services?
28. Is case is related to educational services?
29. Is case is related to medical services?
30. Is case is related to banking services?
31. Is case is related to transportation services?
32. Is case is related to insurance services?
33. Is case is related to housing items?
34. Is case is related to electronic items?
35. Is case is related to telecommunication items?
36. Is case is related to automobiles?
37. Is case is related to electricity board?

If the answer of any of the question from 1-19 is YES than it will consider under CRIMINAL CASE, else if the answer of any of the question from 20-21 is YES than it will consider under CIVIL CASE, else if the answer of any of the question from 25-35 is YES than it will consider under CONSUMER CASE.

Work flow can be understood by the following figure:

![Flow of defragmentation of case](image)

Figure 2: Flow of defragmentation of case

4. **Case Study**

Following are the few case studies related to knowledge based expert system with specific reference to Consumer Protection Act as per as law:-

4.1. **CASE-1: {KAMELESHWARI BAI VS. PEELURAM}**

- Respondent(Peeluram) file an application for divorce on the ground that the appellant(Kamleshwari Bai) was not ready to adjust in poor family of the respondent and has started committing cruelty and has left the matrimonial house without any cause and she lodged a false report of demand of dowry against the respondent and his relatives in which they were acquitted. Appellant pleaded that respondent has married with SumitraBai hence he used to beat her and ousted the appellant from his house and respondent demanded Rs. 50,000/- hence she lodged a report, the respondent has now left SumitraBai hence she is ready to live with the respondent. Trial court passed a decree of divorce.

According to legal Expert: - CRIMINAL CASE
According to KDB-1 - As answer of Q.No.3 and Q.No.19 is YES hence it is CRIMINAL CASE.
By the above figure we can understand the flow of the case. The legal expert will answer the question on behalf of the client. On the basis of the answer obtained, expert system will find that the answer of Q.3 and Q.19 is YES and hence expert system conclude the case as criminal case.

4.2. CASE-2:- {TEJRAM DEWANGAN VS. STATE OF C.G. & OTHERS}

-According to appellant (Tejram Dewangan) he is in possession & management of a temple property which is private trust but second respondent illegally registered the temple as public trust and directed the applicant to handover the temple to 3rd respondent (Others), though in W.P(c) No. 2474/10 on 14-6-2010 order to maintain status quo was passed in favour of appellant with respect to the possession of temple property. The respondents are putting pressure upon him with help of police administration. Hence civil suit against the respondent claiming relief of declaration and injunction also filed application for temporary injunction. A.D.J found prima facie case in favour of plaintiff but rejected application.

According to legal Expert: - CIVIL CASE
According to KDB-1 - As answer of Q.No.21 is YES hence it is CIVIL CASE.
By the above figure we can understand the flow of the case. The legal expert will answer the question on behalf of the client. On the basis of the answer obtained, expert system will find that the answer of Q.21 is YES and hence expert system concludes the case as civil case.

### 4.3. CASE-3: {UNITED INDIAN INSURANCE CO. LTD VS K.M. POONMA & OTHERS}

-Vehicles carrying 15 persons meet an accident, out of 15 seven people died and 8 were injured. Vehicle was insured for 6 persons only.

According to legal Expert: CONSUMER CASE
According to KDB-1 - As answer of Q.No.32 is YES hence it is CONSUMER CASE.

![Figure 5: Flow of CASE-3](image)

By the above figure we can understand the flow of the case. The legal expert will answer the question on behalf of the client. On the basis of the answer obtained, expert system will find that the answer of Q.32 is YES and hence expert system concludes the case as consumer case.

### 4.4. CASE-4: {KISHORE KUMAR GANGULY VS. STATE OF C.G.}

-On 18-11-1990 the applicant (Kishore Kumar Ganguly) agreed to sell the disputed plot to the complainant Mrs. Lamxi Manthaini & after receiving full consideration handed over possession to complainant and executed agreement to sell, it was agreed that after obtaining permission from the Raipur Development Authority(RDA) the applicant wile executed sale deed. Applicant executed power of attorney in favour of brother-in -law of the complainant for execution of sale deed. When attorney holder apply for the permission before the RDA the applicant informed that he is cancelling the power of attorney and in the year 2007 executed sale deed in favour of Ashok Jadwani. On report of complainant challan was presented before the JMFC who framed charge, hence this revision.

According to legal Expert: CIVIL CASE
According to KDB-1 - As answer of Q.No.23 is YES hence it is CIVIL CASE.
By the above figure we can understand the flow of the case. The legal expert will answer the question on behalf of the client. On the basis of the answer obtained, expert system will find that the answer of Q.23 is YES and hence expert system concludes the case as civil case.

4.5. CASE-5:- {ORIENTAL INSURANCE CO.LTD VS. ADDITIONAL SECRETARY C.G. STATE POWER HOLDING CO. LTD}

-Complainant organization (Oriental Insurance Co.Ltd.) had obtained insurance policy for its employees. Shri Kaushal Prasad the employee of the complainant who died on 7-6-2005 in road accident. By letter dated 1-3-2007 the O.P. informed the complainant that claim has been repudiated; hence the complainant filed the complaint for receiving payment of Rs. 4,00,000/- towards the insured sum together with the sum of Rs. 50,000/- as financial loss suffered by the complainant.

According to legal Expert:- CONSUMER CASE
According to KDB-1 - As answer of Q.No.32 is YES hence it is CONSUMER CASE.
By the above figure we can understand the flow of the case. The legal expert will answer the question on behalf of the client. On the basis of the answer obtained, expert system will find that the answer of Q.32 is YES and hence expert system conclude the case as consumer case.

5. CONCLUSION

On the basis of the decision obtained from Knowledge Database-1(KDB-1), we will conclude that whether the case is civil, criminal or consumer on the basis of set of questions asked from user (Q.1 - Q.37). As we are dealing with Consumer Protection Act, civil and criminal cases will not be entertained here. The result thus obtained will help in making decision about the consumer type of cases for developing a knowledge based expert system for Consumer Protection Act. Defragmentation of Indian Legal Cases according to the set of rules developed in KDB-1 helps to determine the type of case, which further helps in proceeding towards consumer cases. The set of rules generated in KDB-1 can be increased or decreased depending upon the real world problem. The paper helps general public to understand the legal cases and does not try to replace judges and advocates but can help these professionals to decide the problems.

REFERENCES


AUTHOR

Goldi Soni received her B.Sc. degree in Information Technology from Government College of Science, Raipur, India, in 2007, the MCA degree in computer application from National Institute of Technology Raipur, India, in 2010. She is pursuing PhD from Dr. C.V. Raman University, Bilaspur (C.G) since2013. Her research interests include Knowledge Based System, Expert System.