
SIGNIFICANCE OF SCIENTIFIC EVIDENCE IN CONSUMER LITIGATION: AN ANALYTICAL STUDY

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ABSTRACT

In the recent times, due to growth & development of E-Commerce various consumer disputes has been arisen. Due to these multiple types of consumer litigation have taken place. In order to solve and resolve such dispute and make the consumer redressal forum efficient and effective, new method of resolving the disputes have to be considered. Due to development in the science and technologies various methods have been incorporated for the consideration of the evidence in any dispute. Digital forensic is one such method which will highly applicable in the field of E-commerce section and will be significantly helpful in resolving the consumer disputes originated from such section. Not only this, it will help the consumer as well as the service providers with respect to conclusion or resolving of the cases in fast pace. Not only this different types of consumer redressal system can be made available to the consumer as well as service provider without approaching to the forum for such disputes. Various E-Commerce guidelines have already in place to protect the consumer as well as various services provider. To make it more effective and efficient, such scientific method can be incorporated in investigation and consideration of the disputes while resolving. As the Consumer Protection Act, 2019 have identified various aspects of the consumer dispute redressal mechanism including identifying products liability, mediation and solving of various offences including prescribe penalties, scientific application including digital forensic will help the consumer redressal mechanism in a different and effective way. In this paper authors will be highlighting the current system of redressal system and how well it can be made effective and efficient with the involvement of the scientific evidence, forensic evidence and Digital evidence which will helps in the reduction of the lengthy and multiple consumer litigations or disputes. It will also highlight the current E-commerce mechanism as how well it can be organised from the perspective of both consumer as well as service provider.

Keywords: Consumer Dispute Mechanism, Scientific Evidence, Consumer Litigation

I. Introduction

Due to advent of technologies and emergence of e-commerce in different field made the works easy for various sectors. Several sectors have been incorporating the new technologies for efficient working condition. E-commerce is something which has helped the traditional markets to absolve within the virtual market based on science and technologies. Several e-markets have been emerged due to such development. A huge number of consumers have been involved in the online transactions themselves due to its rapid growth and efficiency. Consumer also includes the person who "buys any goods" and "hires or avails any services" includes offline or online transactions through electronic means or by teleshopping or direct selling or multi-level marketing.¹ Various consumers considered the e-commerce websites for their transactions. Electronic commerce (E commerce) is considered a process by which business sell their products on the electronic medium and vis-à-vis the consumer can buy the products from the medium. Various E-Commerce players are present in the market due to various significant opportunities for businesses. Amazon, PhonePay, G-Pay, Flipkart etc which involve in the online business whether it involves selling and purchase of merchandise or involve in the payment related transactions. These players provides various assistance and virtual market to the consumers at large scale. It also ties up with various payment mechanism which occurs online as well. Thus online or this virtual market in the form of E-Commerce.

E-commerce provides the opportunities to both the sides whether it is consumer or seller. It give seller the market where they can advertise their products and services and at the same time consumer will get the idea of the products and services to avail them as per their need. Market in India is still in the form of the traditional markets even though such e-commerce in the form of virtual market existed. Many people in India follows the traditional way of marketing which is generally based on trust and personal relationship among sellers and consumers. Face to face is the way of market in India. But still gradually online transaction through virtual markets have also been deployed for the consumer-seller benefits. It is still growing. Such market which are new to the Indian customers often create various problems before them. Most of the Indian customers and sellers do not aware of the mechanism of the virtual market but due to competition and business opportunities, they are somehow involve in them. Such limited awareness of this cyber or virtual market create problems and difficulties for them. Some of the goes to such an extent where Both the sides have to face the cyber offences. Various legal

¹ Section 2(7) Consumer, Consumer Protection Act, 2019.

issues are not known by the consumers as well as sellers who are new to this medium of E-commerce. Therefore they are facing huge difficulties and sometimes cyber offences. It also leads to various consumer litigations as well which if might prolonged effect their business as well as personal well being. E-commerce is one of the face of the cyber world which works online with the help of internet. In this cyber world or cyber space various things does not happen face to face or on the basis of trust and personal relationship among consumer and sellers. Most of the time consumer is not aware of the seller and vice-versa. Due to which identification of the parties to disputes itself takes time. As in the e-commerce several parties are involved in the form of various intermediaries. Issues also arise of the legal validity and authenticity of such online markets including sellers and customers. Various issues of the privacy and security are also surrounds such online markets in e-commerce. However such issues and challenges have not effected the e-commerce in India, therefore it is thriving in India where several companies, startups have been coming in this business including various types of services and products.

Different facets which has to be recognised by the Electronic Commerce:

There are several issues and concerns which surrounds the e-commerce. E-commerce must address these issues which are mentioned bellow. These facets plays an important role in the developing stage of the e-commerce because e-commerce plays a significant role in the economy of any country.

a. Security

First of the requirement is of the maintaining the security for the clients. The security components should at least include a Secure Socket layer also called as SSL for secure data transfer and with it and 128-bit or higher encryption of stored data when numbers of credit card are to be stored. With addition to it, merchant certificates and comparable security protocol like SET is to be used to maintain security. For frequent abusers, velocity checking of credit card numbers is important to cut down number of forgery attempts and those who are using credit card of others and finally message encryption ensures that the price, quantity and item doesn't

change after the transaction is made which is important to maintain integrity of the transaction.²

b. User authorisation and authentication

Since several transaction are occurring in the e-commerce online only, therefore it is required that such functions with respect to the identification of the parties such as the seller and buyer must be done properly. In these cases separate used ID and password will be given to the parties for their transaction. Such identification must be done properly which gives the complete identity of the parties. A proper verification is also done with the parties before any such transaction. This on ground identification and authentication is involved in the virtual market in e-commerce. Now a days in various B2B's parties, separate electronic signature and digital signatures are considered for the transaction between the parties in e-commerce platform. Such identification and authentication in the form of virtual certificate plays a very important role in the identification of the parties involved in the online transactions with reliability and authenticity. Such data cannot be distorted without due process. Such scientific evidence can be utilised for the identification of the parties and also to identify the liabilities among them.

c. Customer Data Management

Customer plays an integral role in the e-commerce whether it is B2B model or B2C model. Wherever the parties involves in the online transactions, their choices and preference can also be captured and stored on the basis of the artificial intelligence algorithm, which enable them to make their choices properly. Such customisation is one of the eruption of the e-commerce players which they provide to their customers for the proper online transaction. This also assist the customer as well for purchasing things online. In this mechanism, customer chooses their products as per their preferences. Such transaction then fulfil the basic criteria of the consumers basis rights i.e. consumer has all the right to identify, select and purchase the products as per their wishes. Such transaction is conclusive. So if any litigation is arises which involves the question whether consumer selected such products or not, can be answered with the help of such electronic evidence which shows the option available to them and selection made by them. Such customisation and personalisation assist consumer transactions. Such data is stored properly in the systems which is being as records for further transactions. With addition to it,

² Israel D. Fianyi, 'Curbing cyber-crime and Enhancing e-commerce security with Digital Forensics' (2015) Volume 12, Issue 6, IJCSI International Journal of Computer Science Issues, ISSN (Print): 1694-0814 | ISSN (Online): 1694-0784 78

customer data stored online could help buyer in registering at the site and personalise their sale plus system is set up to save the transaction details which is done to avoid entering the debit/credit card details multiple times with each transaction.³ On the basis of the customer profile and their transaction activities various offers and discounts are also provided to them which also helps the customer dealing. Virtual communities, multiple merchants supporting a common theme, attract buyers interested in a particular topic or industry.

d. Online Transaction: Orders and its Management

The system of online transaction passes through a process which is an integral process in e-commerce setup. A proper channel of line is identified through which such orders will be managed including placing, identifying, handling, payment and delivering of the same. Various softwares, scientific technologies work underneath it. Such software are Order Capture software which digitally place the same before the seller with the help of intermediaries. A proper channel of interactions is already placed in the software without online transaction will not be completed. After following such channel of transaction orders can be booked and payment will be made. Such data is also stored properly which includes the different parties including seller, intermediaries, delivering parties involved in the proper carrying out of the orders electronically and such data will be stored for future references for both the parties. Since such data is stored properly electronically, chances of fabrication is very less. With it, keeping records of the transaction, allowing customers the use of shopping carts and to real time transaction records with audit trail reports for merchants to process their sale records and products sold.

e. Payment Security

One of the major issues arises in the e-commerce is whether the payment channel is secured or not. Financial information of the parties play an integral role in the e-commerce. Several e-commerce players provide for the saving of the financial information for future transaction. Whether such information is stored and secured properly or not is one of the major concerns which can be reduced with the help of the various intermediaries who provide the assistance in payment process. Several intermediaries tie up with the e-commerce players for the online payments. Due to e-commerce setup several payment facilities have been provided to the

³ Ibid.

customers such as Net Banking, payment via credit or debit card, cash on delivery, online wallets system, various online portals such as PhonePay, PayPal, etc. All these recorded electronically which can be produced before the forum in case of any issues arises in consumer litigation with respect to payment issues as per the procedure provided in Information Technologies Act, 2000. Such record can be considered as a electronic evidence under section 3 of Indian Evidence Act, 1872.

f. Shipment of the Orders

After an order is placed for physical goods, the good must be shipped. The e-commerce solution should integrate the shipping charges, and provide it to the buyer before the purchase is made. Ideally, the electronic commerce solution should communicate with shipping companies to update a buyer's order status, and communicate the order status to existing back office systems and back to the customers. Due to development in technologies a real time update is provided to the customers with respect to shipping of their order. A proper acknowledgement process is also provided to the customers with respect to goods whether they are received by the customers or not.

g. After Services to Customers

Various e-commerce players provided the facilities of the after services to their customers after the transaction. Such services and securities provided 24 hours and 365 days. Due to advent in the technologies, real time solutions is also provided through various customer care services numbers. Not only this via social media, several services is being offered by the e-commerce player to their customers. Through bots also solution can be provided to the customers. Such grievance if arises in the consumer litigations, records of such after services can be provided in the forum for speedy decisions.

II. Major Issues and Challenges with E-Commerce pertaining to Litigation:

The explosion in the e-commerce industry which has been necessitated by the growth and advance expansion of Information technology and its related facilities in recent years have been met with adverse security issues thus affecting the industry and the entire online activities.⁴ Online business is solely done via the internet without any form of contact as the transaction is

⁴ Supra 3

done via a technology mediated platform. Payment is done directly into the business owners account or through a third party payment system in this regard the customer is made to declare his/her confidential bank details to enable the other party get the money and then send whatever has been bought through a delivery service. There is virtually no physical encounter between the parties.⁵ Despite the successes e- commerce is experiencing in the e- world, there remain an issue of security which most often is to the detriment of the online shopper and consequently the business owners as well. The upsurges in cyber-crime by unknown assailant who usually take the advantage the internet offers and in anonymity perpetrate heinous crime under the notion that they cannot be seen, most crimes are perpetrated with this belief system.⁶ There are various crimes that are committed via the internet and its related technologies from denial of services, identity theft, Privacy violation and intrusion as well as industrial and financial espionage. It also protects the unfair trade practices made through any electronic medium.⁷

E-Risk

Risk is an eminent constituent of any business operation in any part of the world, e-commerce in this respect is not immune to risk associated with the internet and its related platforms. Especially in recent revolution of mobile commerce which has enabled businesses to rapidly expand.⁸ Some of the risk that are associated with e- commerce includes but not limited to, stolen Credit card number, personality theft, stolen Social Security Numbers, and sometimes goods bought and paid for never arrives. All these eminent issues and more are rampant because there is no physical encounter between the buyer and the seller basically; electronic mediums as mentioned earlier are employed⁹. E-commerce risk and security is somehow known to the prospective customers¹⁰. The Internet though presents many opportunities to companies and individuals, the benefits cannot usually be compared to the degree of damage that results from security breaches. Hackers, phishing, identity theft, credit card details theft, viruses, malware,

⁵ Gnanasekar, J., 'Enhanced multi agents based model for convergent business services' (2014).

⁶ Perez, J., 'Gartner: Security concerns to stunt e- commerce growth' (2005) Computer World.

⁷ Sec.2(47) Unfair trade Practices, Consumer Protection Act, 2019

⁸ Kim, S.-S., Hong, J.-W., & You, Y.-Y., 'an Exploratory Study on E-Business Risks Due to the Sector Classification of Small and Medium-Sized Enterprises' (2015) Indian Journal of Science and Technology, 8(S8), 387-396

⁹ Williams, D. E., 'An Evolutionary Approach to e- Tailing: Implications for Practitioners Handbook of Strategic e- Business Management' (2014) Springer pp. 433-466

¹⁰ LaRose, R., & Rifon, N. J., 'Promoting i-safety: effects of privacy warnings and privacy seals on risk assessment and online privacy behavior.' (2007) Journal of Consumer Affairs, 41(1), 127-149.

among others are major Security issues that confronts and frightens individual customers and companies at any level of online related business or E-commerce.

III. Application of Scientific Evidence in Litigation through Forensic Science

With respect to the investigations, now a days forensic science plays an integral and significant parts in the investigations. It also helps the justice administration systems along with law enforcement agencies to achieve the decision in any case with proper authenticity, reliability and efficiently. Supreme Court of India has identified the necessity of scientific investigation in the case of *Som Prakash v. State of Delhi*.¹¹ In the landmark case of *Selvi v. State of Karnataka*¹², Hon'ble Supreme Court has recognised the advanced scientific method of investigation such as polygraph and Narco Analysis as a part of investigation u/s 2(h) of Code of Criminal Procedure. Forensic science has different branches where with respect to the e-commerce setup, cyber forensic or digital Forensic is very significant and played an important role. Today's due to advent in the science and technologies various cyber offences have traced down and solved with the help of the digital forensic. Digital forensic deals with the data in the cyber world which conclusively leads to potential offenders and as well as victims. Due to encryption of the data in the cyber world is continuously stored and protected with the help of various technologies, fabrication and tampering is close to impossible. Thus digital forensic can be one way to solve the consumer related litigation in the forum. Consumer forum can take the help of such mechanism or branch of forensic science which will help the forum to reach to their judgment or decision with full reliability and authenticity. Rather than the other branches of forensic science which helps in different types of crimes, digital forensic is much more accurate and reliable as it deals with computer network, internet, etc. where impossibilities of the tampering or fabrications is very less. Even though if such tampering or fabrication occurs due to hacking or other cyber offences, customers can be protected by various securities measures. Various levels of authentications is present now days to curb such cyber offences in e-commerce setup. These all processes can be rectified continuously by the e-commerce players to protect their data and customers from such cyber offences. Therefore digital forensic science will help the forum in investigation, analysing of the evidences and decision making. Investigating agency has, therefore, to look for other ways and means to improve the quality of investigation, which can only be through the collection of scientific

¹¹ *Som Prakash v. State of Delhi* AIR 1974 SC 983

¹² *Selvi v. State of Karnataka* 2010 (7) SCC 263

evidence. In this age of science, we have to build legal foundations that are sound in science as well as in law. Practices and principles that served in the past, now people think, must give way to innovative and creative methods, if we want to save our criminal justice system.¹³

Significance of Forensic Science in Investigation

Forensic Science follows certain principles before making any tools, technologies or method to be adopted for investigation. Following are the principles of Forensic Science which makes it more significant and how it can be incorporated in the offences against the women majorly with respect to sexual offences.

- A. Principle of Individuality:** this principles speaks that each and every matter has its own individuality which can be utilised for the identification of different evidences. In the e-commerce setup each and every transaction is encrypted with unique code and data which shows the individualistic character of the transactions by customers and sellers. It helps the forum as well for identification the actual parties.
- B. Principle of Exchange:** “*Contact leaves traces*”. It speaks a that when two things contacts each other, they exchange traces and their character with each other.this is one of the important principles given by Edmond Locard due ti which this principle is also known as Locard Principle. Such data can be generated and stored when customer and seller will come across. Such data in the form of transaction occurs which follows the basic principle of exchange. So the exchange of information between customer and sellers including orders, selection, payment, etc. will occurs due to their transaction. Such recorded data can be produced to show the transaction occurs between them before forum.
- C. Principle of Progressive Change:** “ objects gets change due to passage of time”. It speaks about the changes occur in the matter due to passage of time. Once data is recorded and stored in the cyber space. It will remain intact. But data which is continuously generated due to ongoing transaction also gets recorded as how it was proceeds electronically between the parties from staring till dispute arises.
- D. Principle of Circumstantial Facts:** “*Men can lie but facts don't*”, Principle of Circumstantial Facts is that facts speaks for themselves. Men may lie with respect to facts

¹³ Dharma Deo Yadav v State of Uttar Pradesh 2014 SCC 509

in issue but facts don't. Facts in the form of direct and circumstantial so many things about the crimes. Now days, Men and women can lie but facts do not. As per this principles, data is one of the major piece of information which is in the form of electronic evidence. Electronic evidence is recognised as per the Indian Evidence Act, 1872 and Information technology Act, 2000. Once it is certified as per the Sec. 65A¹⁴ & 65B¹⁵ of Indian Evidence Act, 1872.

- E. Principle of Comparison:** this principle discuss that only the likes can be analysed. Application of this principle with respect to crime scene investigation and evidence collected thereon shows about the commission of the crimes. Such recorded data can be compared by the forum for the authentication.
- F. Principle of Probability:** this principle shows one of the limitation that even though evidence and traces collected in the process of scientific investigation of crime scene do not conclusively tells about the actual details of the crime scene but they do explain upto certain extent which can be issued for decision making with respect to innocence or guilt of the accused. In the e-commerce setup such recorded data shows the higher probability due to nature of evidence which is close conclusiveness comparing to evidence in the form of testimonial evidence.
- G. Principle of Analysis:** "*Analysis can be no better than sample analysis*". Due to limited piece of infrastructure and time for crime scene investigation, samples can be collected for the examination as per the evidence.

Significance of the Scientific Evidence through Digital Forensic in Consumer Litigation in E-commerce

Importance of the online transaction or transacting with e-commerce is that documentation is happening virtually in real time. Fabrications of such transaction will be impossible due to its

¹⁴ 65A. Special provisions as to evidence relating to electronic record. —The contents of electronic records may be proved in accordance with the provisions of section 65B: Indian Evidence Act, 1872

¹⁵ 65B. Admissibility of electronic records. —(1) Notwithstanding anything contained in this Act, any information contained in an electronic record which is printed on a paper, stored, recorded or copied in optical or magnetic media produced by a computer (hereinafter referred to as the computer output) shall be deemed to be also a document, if the conditions mentioned in this section are satisfied in relation to the information and computer in question and shall be admissible in any proceedings, without further proof or production of the original, as evidence or any contents of the original or of any fact stated therein of which direct evidence would be admissible.: Indian Evidence Act, 1872

virtual recording and storing in real time. Such data can be utilised by the courts for dealing with any disputes related with consumer issues. Consumer litigation can be solved with the help of scientific evidence efficiently and effectively within time frame rather than relying on traditional method of the considering evidences in a case. Traditional method of investigation and collecting evidence will take time and analyses of the same will also take time which cannot help the consumer forum for discharging the case effectively. Due to incorporation of the traditional method, it will prolonged the case to be decided by the consumer forum. Generally consumer forum will rely majorly on the evidence collected through the traditional method, specially on the basis of the documents and eye witness testimony. E-commerce involve the collection and recording of the data in electronic form, which can be utilised and presented in the court for speedy decisions. Documentary evidence collected and presented can be supported with the help of the eyewitness testimony which can be fabricated. Not only the eyewitness testimony can be fabricated but even documentary evidence presented in the consumer forum in a case also be fabricated. Whereas evidence recorded in the e-commerce and virtual market cannot be fabricated easily and supported by the various scientific backing and logics which made the court to decide the case on such evidence quickly.

Digital Forensics

Digital forensic as stated earlier is one of the major branch of the forensic science which deals with the data in various ways of the cyber space. Its major focus is on the extraction of the stored data from the cyber space or the networking system and analyse them with the issues occur in any cyber offences and present the same in front of the court with finalised report on that. Now a days due to continuously increasing in the cyber offences, such digital forensic becomes an integral part of the cyber offences investigation. E-commerce is one of the setup which works in the cyber space only, therefore chances and opportunities for the commission of the cyber offences is high which can be investigated with the help of digital forensic. Not only this such forensic can also traces down the potential offences including their offenders on the basis of their transactions and online activities. Thus modern techniques of digital forensics, which can easily track a premeditated crime over the network by employing network security phenomenon to impede these possible crimes from occurring, can greatly be explored to help control the upsurge of e-commerce crime in recent times¹⁶. With the help of digital forensics

¹⁶Mylonas, A., Meletiadis, V., Mitrou, L., & Gritzalis, D., 'Smartphone sensor data as digital evidence.' (2013). Computers & Security, 38, 51-75.

tools crimes could be detected and prevented before they are eventually committed. Contemporarily digital forensic analyst may work along with law enforcement institutions; retrieving hidden information from a home computer system and office computer, mobiles phones and other digital gadget is very common now¹⁷; These information may range from deleted files to existing documents stored on a hard drive, Network activities or other storage media and also encrypting files that may have been used in committing online related crimes¹⁸.

Digital forensic works where an investigation involves the technology deals with data, computer system, computer network system or internet. Now a days such technologies and tools which involved in the digital forensic is so advances that they can track the criminal irrespective of their location marked by them in their system. If digital forensic is introduced into e-commerce at an advanced level, it will reduce if not totally eradicate cyber-crime due to which business owners in e-commerce market can determine the location of a shopper or customer if the person happens to be a hacker he/she can easily be identified¹⁹.

In the e-commerce setup, it is also recommended that various defensive measures can be engaged to ensure the prevention of cyber-crime. Network forensic is the branch of digital forensics that is characterised by capture, documenting and analysing of activities that take place on a network for the purposes of identifying imposition and subjecting them to investigation. The concept of forensic is classified into two sections, one that enhances the security of the network and the other looks for anomalies on the network to establish evidence²⁰. There are so many tools that underpins these network forensics from TCPDump, Flow-tools, IOS NetFlow, TCPXtract , and Argus among others. These areas of digital forensic are some of the directions that security experts can employ to curb e-commerce crime²¹. With these technologies and tools, in virtual or cyber world dealing with e-commerce players in their market data and activities, where every transaction that is taking place over the network can be monitored and red flag will be raised over the slightest alarm of possible crime perpetration.

¹⁷ Lochner, H., & Zinn, R., 'Detecting invisible traces generated by a cellphone at a crime scene.' (2014) Act Criminological, 27(1), 160-175

¹⁸ Stephenson, P., & Gilbert, K., 'Investigating computer-related crime:' (2013). CRC Press.

¹⁹ Vaseashta, A., Susmann, P., & Braman, E., 'Cyber Security and Resiliency Policy Framework' (2014). (Vol. 38): IOS Press.

²⁰ Kaushik, A. K., Pilli, E. S., & Joshi, R., 'Network forensic system for port scanning attack.' (2010). Paper presented at the Advance Computing Conference (IACC), 2010 IEEE 2nd International.

²¹ Supra 3

IV. Legal Frameworks relating Electronic Evidence collected through Digital Forensic

Since the cyber offences is highly deals with the computer, computer systems, network and networking system which access, records, store and present material facts through data. These data becomes the root of each and every evidence capture digitally. Evidence as highlighted through Indian Evidence Act, 1872 as electronic records or electronic documents provides for the procedure regarding the same as submitted and presented through the certificate. Law has started modifying themselves as the science is developing. But the pace in which science is developing is quite large which cannot be adapted in the laws but the laws can be modified upto certain extent which can help the legal course or criminal justice administration to works or functions properly. There is a vast area with respect to laws which is uncovered to facilitate cyber offences and capture such electronic evidence properly. Law needs to be amended and modified as per the times as at present the reacting time of the law is very slow with respect to scientific development and increasing of different types of new crimes. Section 45²² plays an important roles in consumer litigation which speak about the expert opinion on the matter of science and technologies. Evidences collected through the Digital forensic can be summarised and explained to the consumer forum by the expert in such field for the efficient decision making. Section 293 of the Code of Criminal Procedure, 1973 also appears about the consideration given to the scientific reports generated but eh expert identified within section. Such reports should also includes the reports generated by the scientific experts who are dealing with the digital forensics. Information Technologies Act, 2000 has provided various such measures to tackle with the cyber offences. It helps in the identification and providing punishment for such cyber offences. But due to less number of evidence and potential culprits the act is of no news as no evidence can be admitted in the court collected through the traditional method of investigation. Even after the updation of the Information Technology Act, 2000 on the terms of United Nations Commission on International Trade Law in Information Technology (Amended) Act, 2008 with respect to Model Law on Electronic Signatures. Still investigation of such cyber offences and collection of the required authenticate and reliable evidence is the difficulty present infant of the courts. Lack of scientific investigation with respect to such evidence and using of the same in courts is still a target to achieve. It generally results in the low conviction rate for cyber offences. As per the judgment given by the National Commission Bench of Judges K. S. Chaudhari and Suresh Chandra in the New India Assurance

²² Section 45 of Indian Evidence Act, 1872 - Expert opinion.

Co. Ltd. v/s Sree Sree Madan Mohan Rice Mill on 11th February 2012 in which it was stated that expert opinion can sought on the evidences obtained in consumer litigation. Consumer Protection Act, 2019 has also provided the mechanism of the complaint which can be made electronically as well to dispose of the case efficiently without wasting any time.²³ Consumer Protection Act, 2019 should also provides the due consideration of the electronic evidence or digital evidence as evidence along with evidence recorded orally or documentary annexed with affidavit as per section 38.²⁴

V. Conclusion: Recommendations & Suggestions

In the age of Cyber, it is very important that understanding and efficiency of the digital forensic must understood by everyone. A proper policy framework can be establish which will help in the ascertainment of the functions of the digital forensics for the protection and betterment of the e-commerce. A policy which can help in the investigation of the cyber offences, offences required electronic evidences etc. a specialised brach has to be created with the suitable and expert professional to deal with the cyber forensics who can work efficiently and help the consumer forum in the analysis of the electronic evidence which are collected through digital forensic. This will help the consumer forum to each their decision based on the concrete evidence analyse and rectified properly. Electronic evidence and their admissibility has to be supported properly without any kind of issues or doubt, such kind of system has to be developed as it is one of the conclusive evidence generally as it cannot modified and changed. If it is done, that activity will also gets recorded in the system which also shows the forum about any kind of attempted modification or tempering. On the basis of the aforementioned, following are recommendations which can be incorporated in investigation and in order to deal with the issues of the electronic evidence alongside digital forensic in the consumer litigation related with the e-commerce setup by the consumer forum:

- Digital Forensic has to be given importance and atmosphere has to be created in such a way so that it can developed and functions accordingly and admitted by the forum for the speedy judgment disposal system. Digital forensic will also helps the doubts created in the e-commerce setup and consumer litigations raised before forum.

²³ Section 17, Section 35 Consumer Protection Act, 2019

²⁴ Section 38(6) (6) Every complaint shall be heard by the District Commission on the basis of affidavit and documentary evidence placed on record: Consumer Protection Act, 2019.

- Digital forensic should be adopted and proper training should also be given to officers or officials personnel involved in the investigation and decision making.
- Recognition and admissibility should give more preferences in the consumer litigation arise in the e-commerce setup by the forum rather than relying on the testimonial evidences.
- Expert opinion in case of electronic evidence must be given due consideration rather than a mere opinion as highlighted in section 45 of Indian Evidence Act, 1872 in the consumer litigation.
- Procedure as dealing with the search and seizure as provided in Criminal Procedure Code, 1973 must be complied duly to prove the proper and authentic chain of custody for proving the proper chain of custody of the data recorded and presented before the forum.
- Offences as mentioned in India Penal Code, 1860 and Information Technology Act, 2000 or any other criminal law deals with offences committed through computer system, computer network system etc. must be dealt with the help of digital forensics if it also deals or originated in the consumer litigation.
- Cyber cell must be equipped with all the necessary technologies which deals with the issues occurring in the consumer litigation.
- A policy framework is required which can elaborately discuss about the issues of the cyber offences such as:
 - Categorisation of the cyber offences majorly committed in the e-commerce setup and also Investigation procedures which can be adopted for the offences according to their natures
 - Kind of evidences required whether it is digital or documentary for the decision making by the consumer forum must be highlighted.
 - Scheme of cyber investigation which can be done to facilitate the invention and examination of the evidences by the consumer forum.

- Training and skill must be provided to the professional dealing with such investigations and cases along with their presentation before consumer forum. Infrastructure has to be created which can help in the research and development of the digital-forensics to help Justice Administration with respect to consumer litigation.
- Laws should be modified as required for the betterment and smooth implementation of the cyber forensics so that investigation does not get entangled with the strict procedure as provided in the law.
- E-Commerce Players must mention about the authenticity of their sites and address to protect themselves and consumer from the duplicate sites which do confuse and cheat them.