

INFORMATION TECHNOLOGY ACT IN INDIA: E-COMMERCE VALUE CHAIN ANALYSIS

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ABSTRACT

Growth of e-commerce in India is posing significant legal and regulatory challenges. Deficiencies exist despite significant amendments and introduction of secondary legislation. This paper has been written with an object to highlight deficiencies in information technology legislation governing e-commerce in India. Content analysis of information technology and other relevant legislation/literature revealed that, the IT Act partially address issues like legal validity of electronic transactions, security, content regulation, intermediary liability and jurisdiction, whereas areas like junk mail and spamming, intellectual property, payment, taxation of e-commerce transactions, and consumer protection are unaddressed. This paper fulfills the identification of ten major components of e-commerce value chain vis-à-vis the Information Technology Act and signalizes key deficiencies. Information in this paper is useful for policy and decision makers in government and e-commerce businesses.

Keywords: E-commerce, India, Legal, Regulatory, IT Act

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I. Introduction

E-commerce technologies have changed the structure and environment of business worldwide.¹ Electronic commerce is gaining popularity over traditional commerce because it offers versatility and advantages to business and customers. For an e-commerce merchant world's online population is its potential market. It creates boundary less virtual marketplace, without any geographical limitations, reaching global audiences.^{2,3,4} Market entry costs for a merchant are unusually lower compared to traditional commerce.⁵ Further online sellers can increase their profitability through reduced staff and less distribution costs.^{6,7,8} E-commerce helps reaching customer and suppliers directly, thereby cutting down intermediaries and associated costs⁹ and product and service can be made available to remote areas.¹⁰ Through information rich content which is higher quality and accurate, online sellers can engross the consumer in a way similar to a face to face communication.¹¹ E-commerce Technologies can acquire great deal of personal and online buying behavior information about consumers, like page view, site visit, time spent, content of wish list and shopping cart etc.,^{12,13} this information can be used for personalization and customization.^{14,15,16,17} Better customer service through online technologies yields more customer satisfaction and loyalty.¹⁸ From

¹ Sumanjeet, The state of e-commerce laws in India : a review of Information Technology Act, 52 Int. J. Law Manag. 265–282 (2010).

² Kenneth C. Laudon & Carol Guercio Traver, The Revolution Is Just Beginning, in E-Commerce: Business, Technology, and Society 41–93 (2002).

³ SJPT Joseph, E-Commerce – An Indian Perspective (4 ed. 2012).

⁴ V Rajaraman, Essentials of E-Commerce Technology (2011).

⁵ Laudon and Traver, *supra* note.

⁶ Dave Chaffey, E-Business and E-Commerce Management: Strategy, Implementation and Practice (5 ed. 2013).

⁷ Gary P Schneider, E-Commerce - Strategy, Technology and Implementation (1 ed. 2012).

⁸ Rajaraman, *supra* note.

⁹ Joseph, *supra* note.

¹⁰ Schneider, *supra* note.

¹¹ Jeffrey Rayport & Bernard Jaworski, Introduction to E-commerce (2 ed. 2003).

¹² Joseph, *supra* note.

¹³ Prateek Kalia, Determining effect of webographics on customer's purchase frequency in e-retail, 21 J. Internet Bank. Commer. 1–24 (2016), <http://www.icommercecentral.com/open-access/determining-effect-of-webographics-on-customers-purchase-frequency-in-eretail.php?aid=78448>.

¹⁴ Laudon and Traver, *supra* note.

¹⁵ Chaffey, *supra* note.

¹⁶ Schneider, *supra* note.

¹⁷ Prateek Kalia, Service quality scales in online retail: methodological issues, Int. J. Oper. Prod. Manag.

¹⁸ Joseph, *supra* note.

a buyers perspective, e-commerce technology put control and information in customers hands,^{19,20} buyers can compare and select from wider assortment of product and services,^{21,22,23} customer can buy anything, anytime, anywhere 27x7x365 at their convenience,^{24,25} customers can search products, check descriptions and compare prices more accurately on web with less effort.²⁶ Consumer can ask question, submit a query or enter into a conversation. All this happens on a bigger global platform.²⁷ Through various platforms like blogs, live chat rooms, social networking etc., buyers can discuss their opinion regarding product or services offered by merchant.^{28,29} Organizations across the globe can understand the power of e-commerce and integrating it in their business, this has resulted in tremendous growth of e-commerce worldwide (Table 1).

Buyers at North America and Western Europe are already conversant with digital mode of shopping. Now emerging markets of Asia-Pacific are getting strength out of their huge population base of first time buyers. This can be seen from the rise of China, which is emerging as undisputed leader of digital global market. China is second only to US and holds 60% of Asia Pacific e-commerce. Apart from China, India and Indonesia will drive e-commerce in Asia Pacific region.^{30,31}

¹⁹ *Id.*

²⁰ Prateek Kalia, Tejinderpal Singh & Navdeep Kaur, *An Empirical Study of Online Shoppers' Search Behaviour with Respect to Sources of Information in Northern India*, 56 *PRODUCT. A Q. J. NATL. PRODUCT. COUNC.* 353–361 (2016).

²¹ CHAFFEY, *supra* note.

²² SCHNEIDER, *supra* note.

²³ RAJARAMAN, *supra* note.

²⁴ CHAFFEY, *supra* note.

²⁵ ELIAS M AWAD, *ELECTRONIC COMMERCE – FROM VISION TO FULFILLMENT* (3 ed. 2012).

²⁶ JY Bakos, *Reducing Buyer Search Costs: Implications for Electronic Marketplaces*, 43 *MANAGE. SCI.* 1676–1692 (1997).

²⁷ Laudon and Traver, *supra* note.

²⁸ CHAFFEY, *supra* note.

²⁹ SCHNEIDER, *supra* note.

³⁰ Emarketer.com, *GLOBAL B2C ECOMMERCE SALES TO HIT \$ 1 . 5 TRILLION THIS YEAR DRIVEN BY GROWTH IN EMERGING MARKETS*,

<http://www.emarketer.com/Article/Global-B2C-Ecommerce-Sales-Hit-15-Trillion-This-Year-Drive-n-by-Growth-Emerging-Markets/1010575> (last visited Aug 9, 2014).

³¹ Prateek Kalia, Navdeep Kaur & Tejinderpal Singh, *E-Commerce in India: Evolution and Revolution of Online Retail*, in *E-RETAILING CHALLENGES AND OPPORTUNITIES IN THE GLOBAL MARKETPLACE* 99–120 (Shailja Dixit & Amit Kumar Sinha eds., 2016).

Table 1. B2C e-commerce sales growth worldwide (% change), by region and country, 2011-2017

Region /Country	2011	2012	2013	2014	2015	2016	2017
Middle East and Africa	70.00%	43.00%	31.00%	25.00%	17.20%	15.00%	13.00%
Asia-Pacific	37.20%	32.80%	23.10%	29.00%	20.90%	16.70%	14.20%
Indonesia	104.50%	85.00%	71.30%	45.10%	37.20%	26.00%	22.00%
China*	103.70%	94.10%	65.10%	51.20%	30.60%	22.60%	18.30%
India**	47.20%	39.70%	34.60%	27.10%	23.70%	18.20%	16.60%
South Korea	17.60%	6.00%	6.90%	9.30%	8.30%	8.20%	7.30%
Australia	11.00%	10.50%	6.00%	5.70%	5.10%	5.00%	4.20%
Japan	27.10%	13.20%	7.20%	7.10%	6.70%	5.60%	5.00%
Other	23.90%	12.40%	12.70%	12.00%	11.90%	11.00%	10.20%
Latin America	38.50%	33.00%	22.10%	21.70%	12.70%	10.40%	8.40%
Mexico	46.70%	47.30%	29.60%	23.80%	15.40%	13.30%	10.30%
Brazil	32.90%	21.80%	16.50%	19.10%	8.50%	6.90%	6.00%
Argentina	40.60%	31.00%	14.90%	24.00%	18.00%	12.00%	10.00%
Other	44.50%	46.20%	28.60%	23.40%	15.20%	12.70%	9.80%
Central and Eastern Europe	41.60%	30.10%	20.90%	19.40%	11.00%	7.00%	6.10%
Russia	43.00%	30.10%	21.10%	19.30%	10.80%	6.90%	5.20%
Other	40.80%	30.10%	20.70%	19.40%	11.20%	7.10%	6.60%
Western Europe	17.10%	17.10%	14.00%	11.90%	9.90%	8.30%	7.50%
Italy	32.10%	25.50%	22.60%	20.30%	16.80%	12.40%	12.00%
Spain	22.40%	18.80%	16.20%	13.80%	11.90%	10.00%	8.00%
Sweden	22.00%	18.40%	16.20%	13.30%	10.30%	9.00%	8.40%
Norway	21.80%	17.10%	15.30%	13.30%	10.50%	7.40%	6.40%

Finland	20.10%	16.10%	14.70%	11.20%	9.00%	7.20%	6.30%
UK	14.20%	13.70%	13.70%	12.20%	10.20%	8.20%	7.30%
Germany	17.40%	23.40%	12.80%	9.40%	6.90%	6.50%	6.10%
Denmark	16.50%	14.30%	12.40%	10.60%	8.90%	6.50%	5.90%
Netherlands	20.20%	14.00%	12.40%	10.10%	9.00%	6.70%	5.70%
France	12.20%	12.30%	11.00%	9.10%	8.00%	7.60%	7.10%
Other	19.60%	20.30%	14.70%	12.10%	10.10%	8.90%	8.00%
North America	15.00%	14.00%	12.50%	11.90%	11.40%	10.90%	10.30%
Canada	12.00%	14.30%	14.20%	13.60%	12.60%	11.00%	10.00%
US***	15.20%	14.00%	12.40%	11.80%	11.30%	10.90%	10.40%
Worldwide	23.30%	21.70%	17.10%	18.30%	14.50%	12.40%	11.00%

Source: Emarketer.com (2013)

In India, technology adoption by masses is fueling success of domestic e-commerce players and luring international business like Amazon and Alibaba into Indian market.^{32,33} Electronic retail is emerging as fastest growing segments of e-commerce. In an effort to capture customers in an underdeveloped e-commerce ecosystem, many e-commerce business are either fine tuning their business models³⁴ or putting large portions of their investments in building infrastructure like fulfillment and logistics on their own.³⁵ Undoubtedly, benefits of e-commerce technologies are significant but the Indian e-commerce market has witnessed a dotcom burst earlier in 2000³⁶ and basic challenges such as poor internet penetration,^{37,38,39,40} infrastructure constraints,⁴¹ paucity of funds,⁴² low credit

³² PWC, ECOMMERCE IN INDIA: ACCELERATING GROWTH, http://www.pwc.in/en_IN/in/http://www.pwc.in/assets/pdfs/publications/2015/ecommerce-in-india-accelerating-growth.pdf-accelerating-growth.pdf (last visited Mar 2, 2015).

³³ Prateek Kalia, *Tsunami E-Commerce in India: The Third Wave*, 5 GLOB. ANAL. 47–49 (2016).

³⁴ Prateek Kalia, *Top e-Retailers of India: business model and components*, 6 INT. J. ELECTRON. MARK. RETAIL. 277–298 (2015).

³⁵ PWC & ASSOCHAM, EVOLUTION OF E-COMMERCE IN INDIA, <http://www.pwc.in/assets/pdfs/publications/2014/evolution-of-e-commerce-in-india.pdf> (last visited Feb 16, 2015).

³⁶ K Kumar & B Mahadevan, *Evolution of Business Models in B2C E-Commerce : The Case of Fabmall*, IIMB MANAG. REV. 23–30 (2003), <http://www.iimb.ernet.in/~mahadev/fabmall.pdf>.

³⁷ Deloitte, TECHNOLOGY, MEDIA & TELECOMMUNICATIONS INDIA PREDICTIONS, <http://www2.deloitte.com/content/dam/Deloitte/in/Documents/technology-media-telecommunications/in-tmt-telecom-predictions-noexp.pdf> (last visited Nov 21, 2014).

card penetration,^{43,44} complex tax laws⁴⁵ etc. are still present. In addition to these constraints there is one most important factor, which is causing poor implementation of e-commerce in India is poor legislation.⁴⁶ Many studies have identified government dimension as key factor for e-business adoption decision by a company.⁴⁷ Durbhakula and Kim proposed three indicators of government dimension, which include E-government development, E-participation, and Government policy & vision.⁴⁸ Similarly Rodríguez-ardura, Meseguer-artola and Vilaseca-requena mentioned importance of legal framework, for development of electronic commerce in a country.⁴⁹

³⁸ Bgr.in, INDIA TO HAVE 185 MILLION MOBILE INTERNET USERS BY JUNE, <http://www.bgr.in/news/india-to-have-185-million-mobile-internet-users-by-june-iamai/> (last visited Sep 1, 2014).

³⁹ Statista.com, SHARE OF MOBILE PHONE USERS THAT USE A SMARTPHONE IN INDIA FROM 2010 TO 2017 (2014), <http://www.statista.com/statistics/257048/smartphone-user-penetration-in-india/> (last visited Nov 21, 2014).

⁴⁰ Internetlivestats.com, NUMBER OF INTERNET USERS 2014, <http://www.internetlivestats.com/internet-users/#definitions> (last visited Aug 26, 2014).

⁴¹ McKinsey & Company, BUILDING INDIA: TRANSFORMING THE NATION'S LOGISTICS INFRASTRUCTURE 20 (2010), http://www.mckinsey.com/insights/travel_transportation/~/media/mckinsey/dotcom/insights/travel_transportation/transforming_indias_logistics_infrastructure/building_india-transforming_the_nations_logistics_infrastructure.ashx (last visited Nov 22, 2014).

⁴² The Economist, INDIA RETAIL : SURVIVAL OF THE RICHEST ?, <http://www.eiu.com/industry/article/190895003/india-retail-survival-of-the-richest/2013-08-27#> (last visited Nov 22, 2014).

⁴³ Goutam Das, CASH-ON-DELIVERY : NECESSARY EVIL, <http://businesstoday.intoday.in/story/cash-on-delivery-impact-on-e-commerce-companies-customers/1/202680.html> (last visited Nov 22, 2014).

⁴⁴ Himanshu Agarwal, CASH ON DELIVERY : SHOULD INDIAN ONLINE RETAILERS PERSIST WITH IT? (2014), <http://trak.in/ecommerce/cash-on-delivery-cod-online-payment-mode-indian-stores/> (last visited Nov 22, 2014).

⁴⁵ Alok Patnia, IS INDIAN GRANDFATHERED TAX LAWS A ROADBLOCK FOR E-COMMERCE IN INDIA ?, <http://taxmantra.com/is-indian-grandfathered-tax-laws-a-roadblock-for-e-commerce-in-india.html/> (last visited Nov 22, 2014).

⁴⁶ Sumanjeet, *supra* note.

⁴⁷ A. Papazafeiropoulou & A. Pouloudi, *The Government's Role in Improving Electronic Commerce Adoption*, in PROCEEDINGS OF THE 8TH EUROPEAN CONFERENCE ON INFORMATION SYSTEMS (2000), <http://aisel.aisnet.org/ecis2000/188>.

⁴⁸ Venkata Vijay K Durbhakula & Dan J Kim, *E-business for Nations : A Study of National Level E- business Adoption Factors Using Country Framework*, 6 J. THEOR. APPL. ELECTRON. COMMER. RES. 1–12 (2011).

⁴⁹ Inma Rodríguez-ardura, Antoni Meseguer-artola & Jordi Vilaseca-requena, *Factors Influencing the Evolution of Electronic Commerce : An Empirical Analysis in a Developed Market Economy*, 3 J. THEOR. APPL. ELECTRON. COMMER. RES. 18–29 (2008).

This paper is critically examining the IT Act 2000 and the IT (Amendment) Act 2008 with an object to point out shortcomings in e-commerce laws in India. Present paper is divided into six sections. Section 2 briefs about origin and basic objectives of the IT Act in India. Section 3 outlines identification of 10 key deficiency areas in e-commerce law in India vis-à-vis e-commerce value chain. Section 4 evaluates e-commerce law on 10 identified deficiency areas. Section 5 discusses Online Dispute Resolution (ODR) as an alternative approach and section 6 presents concluding remarks.

II. Origin of IT legislation in India

With more number of nations adopting electronic governance and enormous growth of electronic commerce, 1990's witnessed advent of computerization and globalization. Till that time almost all of the trade and transactions were done through documents which were subsequently transmitted or sent through post or telex. Paper hardcopies were used as evidence and records. As electronic communication and email become prevalent in international trade, an immediate and impending need for recognition of electronic records was felt.⁵⁰

A model law on electronic commerce was framed by the United Nations Commission on International Trade Law in 1996, which was adopted after resolution A/RES/51/162, dated 30 January 1997 in the United Nations general assembly. Understanding for the need of uniformity of the law as alternative to paper-based methods of communication and storage of information, it was recommended in the resolution, that all states while enacting or revising their laws, should give favorable consideration to the said model law.⁵¹

"*E Commerce Act 1998*" was the first draft of the legislation made by the Ministry of Commerce, Government of India following the UNCITRAL model law on electronic commerce.⁵² When a separate Ministry for Information Technology came into existence, this legislation was re-drafted as "*Information Technology Bill 1999*". After being placed in parliament in December 1999 and passed in May 2000, this draft got assent of the President on June 9, 2000. On October 17, 2000 vide

⁵⁰ IIBF, CYBER LAWS IN INDIA, <http://www.iibf.org.in/documents/Cyber-Laws-chapter-in-Legal-Aspects-Book.pdf> (last visited May 10, 2014).

⁵¹ UNCITRAL, UNCITRAL MODEL LAW ON ELECTRONIC COMMERCE (1996), http://www.uncitral.org/uncitral/en/uncitral_texts/electronic_commerce/1996Model.html (last visited Sep 10, 2014).

⁵² Subhajit Basu & Richard Jones, *Indian Information and Technology Act 2000: review of the Regulatory Powers under the Act*, 19 INT. REV. LAW, COMPUT. TECHNOL. 209–230 (2005).

notification number G.S.R 788(E) “*IT Act 2000*” was finally notified.^{53,54} To give provision for new breed of cybercrimes and to bring harmonization with model law on electronic signatures the IT (Amendment) Bill 2006 was introduced by the Government in the House of Commons (Lok Sabha) ⁵⁵ on 15th December 2006. This bill was passed by both the houses of parliament on 23rd December 2008. Later the IT (Amendment) Act 2008 received the assent of the President on 5th February 2009 and was notified in the Gazette of India.⁵⁶ Broadly, essence of the act can be captured under following broad headings: ^{57,58,59,60,61,62,63}

- Promote e-commerce: To grant legal recognition for electronic commerce transactions, electronic records, digital signatures, electronic fund transfers between banks and financial institutions, facilitating electronic storage of data etc.
- Promote e-governance: Facilitating electronic filing and acceptance of digitally signed documents with Government departments.
- Regulation of certification authorities: Appointment of an appropriate government certifying authority for wider acceptance and enforcement of digitally signed documents, licensing to CAs, recognition of foreign CAs.
- Cyber contraventions and jurisdiction related: Delineating offenses and contraventions and outlining justice dispensation systems for cybercrimes, appointing adjudicating officers and establishing Cyber Appellate Tribunal

⁵³ SANJAY PANDEY, CURBING CYBER CRIME : A CRITIQUE OF INFORMATION TECHNOLOGY ACT 2000 AND IT ACT AMENDMENT 2008 (2008), <http://www.softcell.com/pdf/IT-Act-Paper.pdf>.

⁵⁴ C M Abhilash, *E-Commerce Law in Developing Countries: An Indian Perspective*, 11 INF. COMMUN. TECHNOL. LAW 269–281 (2002).

⁵⁵ Our Parliament, , <http://parliamentofindia.nic.in/ls/intro/p1.htm> (last visited May 12, 2015).

⁵⁶ Press Information Bureau, INFORMATION TECHNOLOGY (AMENDMENT) ACT, 2008 COMES INTO FORCE PRESS INFORMATION BUREAU, GOVERNMENT OF INDIA (2009), <http://pib.nic.in/newsite/erelease.aspx?relid=53617> (last visited Oct 8, 2014).

⁵⁷ ICAI, INFORMATION TECHNOLOGY (AMENDMENT) ACT 2008, <http://www.icaiknowledgegateway.org/littledms/folder1/chapter-10-information-technology-amendment-act-2008.pdf> (last visited Oct 10, 2014).

⁵⁸ IT Act 2000, , <http://deity.gov.in/content/view-it-act-2000> (last visited Oct 8, 2014).

⁵⁹ M Ajmal Edappagath, *Cyberlaws in Information Age*, in ASIA-PACIFIC REGIONAL WORKSHOP ON EQUAL ACCESS OF WOMEN IN ICT 1–7 (2001).

⁶⁰ DIDAR SINGH, ELECTRONIC COMMERCE: ISSUES OF POLICY AND STRATEGY FOR INDIA (2002), <http://www.eldis.org/vfile/upload/1/document/0708/doc14597.pdf> (last visited Mar 10, 2014).

⁶¹ RAJARAMAN, *supra* note.

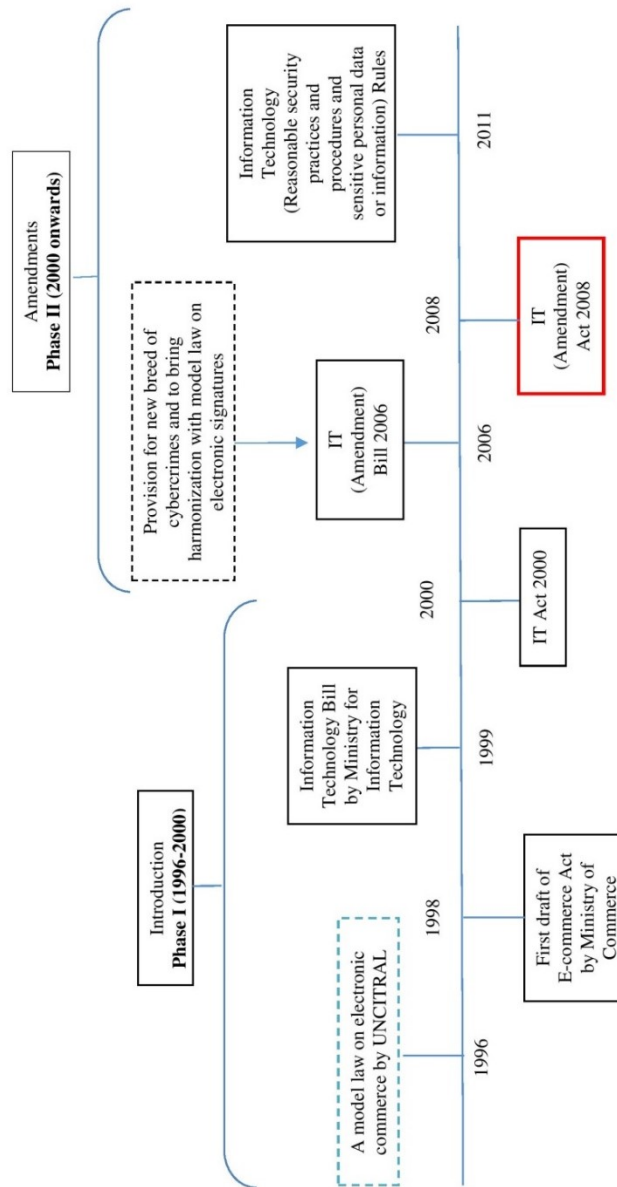
⁶² Basu and Jones, *supra* note.

⁶³ JOSEPH, *supra* note.

- Consequential amendments in other acts: To amend the Indian Penal Code, the Indian Evidence Act 1872, the Banker’s Book Evidence Act 1891, and the Reserve Bank of India Act 1934.

Evolution of E-commerce law in India is graphically depicted in the figure 1 below:

Figure 1: Evolution of E-commerce legislation in India




III. Identification of legal parameters/issues in e-commerce value chain

Series of interdependent activities of a business are present in its value chain and it depicts how value is added through various activities to the company in general. From e-commerce point of view, a company can add competitive advantage to its value chain through incorporation of communication technology within its business model. In today’s business environment e-commerce facilitates cost reduction, product quality improvement, building loyal customer base and efficiency in sale of goods or services. Canvassing various elements of e-commerce value chain, experts can achieve holistic improvement of the firm, for example, information is collected and shared between e-merchants and buyers through websites, online payment flow is facilitated through invoicing, customers can receive customized products through independent shippers and inventory and warehousing can be kept minimum.⁶⁴ This e-commerce process comprises of various business processes to support electronic buying and selling of goods and services, as shown in figure 2.

Figure 2. Business processes supporting electronic buying and selling of goods and services.

Selling process	Market/product research	Market stimulation/education	Terms negotiation	Order receipt	Order selection and priority	Order billing/payment management	Order scheduling/fulfillment delivery	Customer service and support
Buying process	Product discovery	Product evaluation	Terms negotiation	Order placement	Order tracking	Order payment	Product receipt	Product service and support



Source: O’Brien & Marakas (2007)

O’Brien and Marakas mentioned nine key components of an e-commerce process architecture i.e. access control and security, profiling and personalizing, search management, content management, catalogue management, payment, workflow management, event notification and collaboration and trading.⁶⁵ In case of B2C which is specially customer driven commerce,^{66,67} an understanding of

⁶⁴ AWAD, *supra* note.

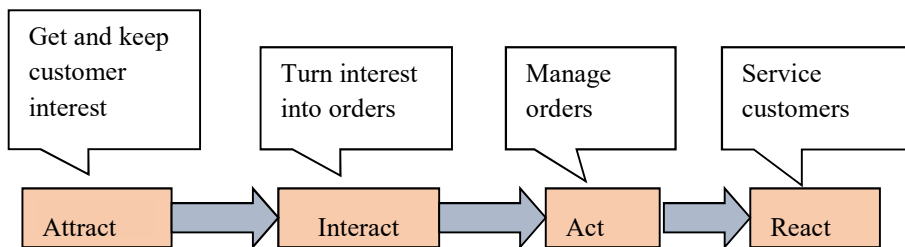
⁶⁵ JAMES A O’BRIEN & GEORGE M MARAKAS, MANAGEMENT INFORMATION SYSTEM (Seventh Ed ed. 2007).

⁶⁶ Peter Elkind, *The hype is big, really big, at Priceline*, FORTUNE 140, 1999, at 193, http://archive.fortune.com/magazines/fortune/fortune_archive/1999/09/06/265311/index.htm.

⁶⁷ Alan R. Hevner, Rosann W. Collins & Monica J. Garfield, *Product and project challenges in*

customer decision process, to predict consumer behavior is essential. Hsia, Wu and Li identified five customer activities and seller responses in customer decision process i.e. need recognition, information search, evaluation of alternatives, choice and post purchase.⁶⁸ The e-commerce value matrix proposed by them include activities like, sending and receiving information, evaluation of alternatives, payment delivery, return, logistics and other post purchase activities. Joseph referred to a generic value chain for internet commerce,⁶⁹ which is mentioned in figure 3.

Figure 3. Generic value chain for internet commerce.



Source: Joseph (2012)

- **Attract** - This is first step of generic internet commerce value chain, and includes steps to draw customers towards primary site through paid advertisement on other websites, television, e-mail print or other form of advertising and marketing efforts.
- **Interact** - Second step is content oriented and includes converting customer interest into orders. Content may be distributed through e-mail or World Wide Web or other media like CD-ROMs. Content can be editorial (changing frequently or infrequently) or technical (static or dynamic).
- **Act** - When the customer has searched a product or service as per his requirements. This step tries to capture the order and includes; *Order processing*, here customer can change quantities of order in his shopping

electronic commerce software development, 33 ACM SIGMIS DATABASE 10–22 (2002).

⁶⁸ Tzyh L. Hsia, Jen H. Wu & Eldon Y. Li, *The e-commerce value matrix and use case model: A goal-driven methodology for eliciting B2C application requirements*, 45 INF. MANAG. 321–330 (2008).

⁶⁹ JOSEPH, *supra* note.

cart and buyer is presented itemized order form including all charges like sales tax and shipping costs, so that he can make payment. *Payment*, here buyer can make payment for the order through variety of payment options available on internet commerce. *Fulfillment*, here order is forwarded to traditional order processing system.

- React - Once sale is completed, customer may face certain difficulties that may require further service

The e-commerce value chain involves various legal challenges at different stages. These parameters/issues in e-commerce are identified on the basis of literature review, summary of which is presented in Table 2. Each parameter/issue is discussed in detail in section 4.

Table 2. Legal parameters/issues in e-commerce.

Legal Parameter	Definition	Reference
Legal validity of e-transactions	Validity of contract formation, communication, acceptance and revocation of proposals expressed in electronic form or by means of an electronic record.	(Basu & Jones 2005; Sumanjeet 2010; Anon 2000; Chaffey 2013; Schneider 2012; Awad 2012)
Security & privacy		
Authentication and identification	Authentication refers to establishing the identity of the purchaser. A subscriber may authenticate any electronic record by electronic signature or electronic authentication technique.	(Chaffey 2013; Anon 2000; Anon 2008)
Privacy	Privacy is moral right of individuals to avoid intrusion into their personal affairs	(Sumanjeet 2010; Joseph 2012; Rajaraman 2011; Chaffey 2013; O'Brien & Marakas 2007; Schneider 2012; Awad 2012; Laudon & Traver 2007; Basu & Jones 2005)
Data protection	A body corporate processing, dealing or	(Sumanjeet 2010; Joseph

	handling any personal data or information in a computer resource which it owns, controls or operates, has to implement and maintain reasonable security practices to prevent wrongful loss or gain to any person.	2012; Rajaraman 2011; Anon 2008; Chaffey 2013; Laudon & Traver 2007; Basu & Jones 2005)
Security of systems	A body corporate processing, dealing or handling any personal data or information in a computer resource which it owns, controls or operates, has to implement and maintain reasonable security practices to prevent wrongful loss or gain to any person.	(O'Brien & Marakas 2007; Anon 2008)
Junk mail and spamming	Spam is unsolicited e-mail (usually bulk mailed and untargeted)	(Sumanjeet 2010; Basu & Jones 2005; Rajaraman 2011; Chaffey 2013)
Content regulation	Website not knowingly host or publish or transmit any information that is grossly harmful, harassing, blasphemous, defamatory, obscene, pornographic, paedophilic, libelous, invasive of another's privacy, hateful, or racially, ethnically objectionable, disparaging, relating or encouraging money laundering or gambling, or otherwise unlawful in any manner.	(Sumanjeet 2010; Basu & Jones 2005; Rajaraman 2011; Chaffey 2013; Schneider 2012)
Intellectual property rights	Protects the intangible property created by corporations or individuals that is protected under copyright, trade mark and patents law.	(Sumanjeet 2010; Basu & Jones 2005; Joseph 2012; Rajaraman 2011; Chaffey 2013; O'Brien & Marakas 2007; Schneider 2012; Awad 2012; Laudon & Traver 2007)
Payment	Online payment services poses complex practical challenges as it includes	(Sumanjeet 2010; Basu & Jones 2005; Chaffey 2013;

	<p>technological capabilities of service providers, commercial relationships, issues of regulation and law (buyer and seller protection), security considerations including identification issues, such as authentication and verification, and co-ordination among a variety of parties with different and sometimes competing interests.</p>	<p>Kalakota & B.Whinston 2009)</p>
<p>Taxation of e-commerce transactions</p>	<p>Tax jurisdiction determines how to tax e-commerce transaction in national or international scenario.</p>	<p>(Sumanjeet 2010; Basu & Jones 2005; Chaffey 2013; Schneider 2012; Awad 2012)</p>
<p>Intermediary liability</p>	<p>Intermediary, with respect to any particular electronic records, means any person who on behalf of another person receives, stores or transmits that record or provides any service with respect to that record and includes telecom service providers, network service providers, internet service providers, web-hosting service providers, search engines, online payment sites, online-auction sites, online-market places and cyber cafes.</p>	<p>(Sumanjeet 2010; Rajaraman 2011; Anon 2008; Anon 2011a; Joseph 2012)</p>
<p>Jurisdiction</p>	<p>Legitimate scope of government power to settle disputes related to e-commerce.</p>	<p>(Sumanjeet 2010; Rajaraman 2011; Schneider 2012)</p>
<p>Consumer Protection</p>	<p>Governs the relationship between consumers and goods/ service providers.</p>	<p>(Sumanjeet 2010; Joseph 2012)</p>

IV. E-commerce value chain analysis of IT Act

Under this study evaluation of e-commerce law in India has been done on the basis of ten relevant parameters/issues which are identified on the basis of literature review of e-commerce law in India, books and reputed journals. Identified parameters/issues are legal validity of electronic transactions, security, junk mail and spamming, content regulation, intellectual property issues, payment, taxation of e-commerce transactions, intermediary liability, jurisdiction issues and consumer protection issues. Subsequent subsections discuss if these identified parameters/ issues have been addressed under e-commerce legislation in India, related acts and amendments are also identified (Table 3).

Table 3. The Information Technology Act vis-a-vis legal parameters/issues in e-commerce.

Sno.	E-commerce value chain	ITAct 2000	IT(A) Act 2008	Other relevant Act/Rules
	Legal validity			
1	of e-transactions	-	Section 10A	Indian Contract Act 1872
	Security			
	Authentication and identification	Section 3	Section 3A	-
	Privacy	Sections 67 & 72	Sections 66E, 67, 67A, 67B & 72A	-
2	Data protection	-	Section 43A	Information Technology (Reasonable security practices and procedures and sensitive personal data or information) Rules 2011
	Security of systems	Sections 65 & 66	Section 66	Information Technology (Reasonable security practices and procedures and sensitive personal data or information)

Rules 2011				
3	Junk mail and spamming	-	Section 66A	-
4	Content regulation	-	Sections 66A, 67 & 67A	Sections 292, 469, 499, 501 and 503 of IPC 1860 Indecent Representation of Women (Prohibition) Act 1986 Information Technology (Intermediaries Guidelines) Rules 2011
5	Intellectual property issues	Sections 43 & 65	-	Trade Marks Act 1999, Copyright Act 1957, Copyright Rules 1958, Patents (Amendment) Act 2005
6	Payment	-	-	Payment and Settlement Systems Act 2007
7	Taxation of e-commerce transactions	-	-	Income Tax Act 1961, Service Tax Rules 1994, Finance Act 1994, Central Sales Tax Act 1956, Customs Act 1962, Central Excise Act 1944
8	Intermediary liability	Section 79	Sections 69A, 69B, 72A & 79	Information Technology (Intermediaries Guidelines) Rules 2011, Copyright (Amendment) Act 2012, Patents (Amendment) Act 2005
9	Jurisdiction issues	Sections 1(2) & 75	-	Section 3 of IPC 1860
10	Consumer Protection	-	-	Consumer Protection Act 1986

A. Legal validity of electronic transactions

Commonly e-contracts can be of three kinds; *browse wrap*, which is binding on the contracting party by mere use of the website. Second is, *shrink wrap*, here

contracting party read the term and conditions after opening the box in which product is packed. Another most popular e-contract is *click wrap*, under which contracting party accepts this contract by clicking on “I accept” tab.^{70,71} Like any other contracts, e-contracts should fulfill the requirements as per the Indian Contract Act 1872.⁷² The IT Act 2000 fortifies validity of e-contracts; further the IT (Amendment) Act 2008 clearly states under section 10A that “Where in a contract formation, the communication of proposals, acceptance of proposals, the revocation of proposals and acceptances, as the case may be, are expressed in electronic form or by means of an electronic record, such electronic contract shall not be deemed to be unenforceable solely on the ground that such electronic form or means was used for that purpose.”

In the present formulation of the IT Act, industry bodies like Confederation of Indian Industries (CII) and National Association of Software and Services Companies (NASSCOM) have reported difficulties associated with the formation of online contracts and legal enforceability of online contracts involving international parties.⁷³ To deal with unconscionable standard form online agreements, jurisprudence in India is not well developed. However, there have been instances in which Indian laws and Indian courts have dealt cases where unequal bargaining positions were negotiated between parties (LIC India vs. Consumer Education & Research Center, 1995 AIR 1811; Lily White vs. R Munuswami, AIR 1966 Mad 13). As compared to conventional contracts, e-contracts face three major issues, first, contract has to be physically signed, and this problem has been resolved with the use of electronic signatures. Second, age of anyone transacting online can’t be verified, whereas the Indian Contract Act 1872 clearly states that contract is not enforceable against minor. Third, paying stamp duty as in case of physical documents is not workable in case of e-contracts.

⁷⁰ EDWARD A. PISACRETA, SETH H. OSTROW & KENNETH A. ADLER, INTELLECTUAL PROPERTY LICENSING: FORMS AND ANALYSIS (Lslf ed. 2015).

⁷¹ Michelle Garcia, *Browsewrap : A Unique Solution to the Slippery Slope of the Clickwrap Conundrum*, 36 CAMPBELL LAW REV. 31–74 (2014), <http://scholarship.law.campbell.edu/cgi/viewcontent.cgi?article=1573&context=clr>.

⁷² The Indian Contract Act 1872, , [http://comtax.up.nic.in/Miscellaneous Act/the-indian-contract-act-1872.pdf](http://comtax.up.nic.in/Miscellaneous%20Act/the-indian-contract-act-1872.pdf) (last visited Feb 23, 2015).

⁷³ Rajiv Rastogi, *India: Country Report on E-Commerce Initiatives*, in INITIATIVES FOR E-COMMERCE CAPACITY BUILDING OF SMALL AND MEDIUM ENTERPRISES 133–146 (2002), http://s3.amazonaws.com/zanran_storage/www.unescap.org/ContentPages/7133916.pdf.

B. Security

Due to intangible and virtual nature of internet, parties involved in transaction with each other have great concern regarding their security and privacy. Four most relevant issues related to security are spotlighted here.

1. Authentication and identification

Various technologies are available today which ensure document authentication and identity of the parties transacting online. It's very important to establish person's capacity, authority and legitimacy to enter a contract or to authenticate electronic record. Section 3 of the IT Act 2000 discusses about authentication of electronic records. Further, a new section i.e. 3A was inserted in the IT (Amendment) Act 2008 and digital signatures were substituted with "electronic signatures".

2. Privacy

While completing an online transaction, a lot of personal information is collected i.e. user's identity, preferences, patterns of search and financial information. This may give rise to two primary privacy concerns, i.e. misuse and unauthorized access of personal information.⁷⁴ The IT Act 2000 partially covered privacy issue under section 72, which mentioned about penalty for breach of confidentiality and privacy; section 67 talks about publication of obscene information in electronic form. Privacy was further discussed in the IT (Amendment) Act 2008 and provisions were chalked out pertaining to punishment for violation of privacy (Section 66E), punishment for disclosure of information in breach of lawful contract (Section 72A), punishment for publishing or transmitting obscene material in electronic form (Section 67), punishment for publishing or transmitting of material containing sexually explicit act etc. in electronic form (Section 67A) and punishment for publishing or transmitting of material depicting children in sexually explicit act etc., in electronic form (Section 67B). Concept of violation of privacy is dealt with limited sense under the IT (Amendment) Act 2008, in a way that privacy of a person is deemed to be violated where images of private body areas are captured.

⁷⁴ Nishith Desai Associates, E-COMMERCE IN INDIA, http://www.nishithdesai.com/fileadmin/user_upload/pdfs/ResearchPapers/E-Commerce_in_India.pdf (last visited Feb 19, 2015).

3. Data protection

Since the IT Act 2000 was not addressing data protection issues; a provision of “compensation for failure to protect data” was introduced under newly inserted section 43A under the IT (Amendment) Act 2008. Later, Reasonable security practices and procedures and sensitive personal data or information rules 2011 provided framework for protection of data in India.⁷⁵ To protect SPDI in the electronic medium, The Data Protection Rules also set guidelines and compliances for body corporate or any person on its behalf handling SPDI, regarding transfer, collection, disclosure of information and reasonable security practices and procedures to protect it.

Data protection and privacy were unaddressed in Indian legislation, but after *Kharak Singh vs. State of UP*, AIR 1963 SC 1295 and *People's Union of Civil Liberties vs. the Union of India*, 1997 (1) SCC 318, Supreme Court of India recognized the “right to privacy” as subset to “right to life and personal liberty”.

4. Security of systems

As sensitive information like passwords, personal details etc. are kept on servers of e-commerce companies; security of such information becomes crucial. These security threats can be external (from hackers, viruses and Trojan horses) or internal (companies own technical staff and employees). The IT Act 2000, list out about hacking with computer system (Section 66) and related penalties. Similarly, section 65 brings up about tampering with computer source documents. Section 66 was amended in the IT (Amendment) Act 2008 to observe computer related offences, but still system security was not adequately addressed. Reasonable security practices and procedures and sensitive personal data or information rules 2011 lists out security practices and standards, and suggests comprehensive documented information security programme and information security policies that contain managerial, technical, operational and physical security control measures that commensurate with information assets being protected with the nature of business.

⁷⁵ Information Technology (Reasonable security practices and procedures and sensitive personal data or information) Rules 2011, , http://deity.gov.in/sites/upload_files/dit/files/RNUS_CyberLaw_15411.pdf (last visited Feb 23, 2015).

C. Junk mail and spamming

Spam, which is also known as Unsolicited Bulk Email (UBE) or Unsolicited Commercial Email (UCE) refers to electronic mail advertisements that are addressed to a recipient with whom the initiator has no existing business or personal relationship and they are not sent at the request of or with the express consent of the recipient.^{76,77} Spammers find it most cheap and efficient mean of contacting potential customers with wide coverage area.⁷⁸ India is ranked fifth in the rating of countries most often attacked by phishers.⁷⁹ India contributes almost 3.43% of unwanted mail, and is ranked 6th as source of world's spam.⁸⁰

There has been no discussion on issue of spamming in the IT Act 2000. It only refers to punishment meted out to a person, who after having secured access to any electronic material without the consent of the concerned person discloses such information to any other person. Since illegality of spamming is not considered, spam legislation is non-existent in India.⁸¹ Although it has not been specifically mentioned but it can be interpreted in the provisions mentioned in section 66A of the IT (Amendment) Act 2008 that, sending of menacing, annoying messages and also misleading information about the origin of the message is punishable with imprisonment up to three years with fine. The Indian chapter of the Coalition Against Unsolicited Commercial Email (CAUCE) is an ad hoc, all volunteer organization, created by netizens, dedicated to control the spam problem before it snowballs into a crisis.⁸²

In India, first judicial order to curb unsolicited emails was *Panatone Finwest Ltd vs. McCoy Infosystems Pvt Ltd*, in which Delhi High Court restrained McCoy

⁷⁶ Priyanka Vora, "SPAM! SPAM! SPAM!" THE NEED FOR AN ANTI-SPAMMING LAW IN INDIA, <http://thegiga.in/LinkClick.aspx?fileticket=wMpHW5Ur8JA=&tabid=589> (last visited Feb 24, 2015).

⁷⁷ MICHAEL D. SCOTT, *INTERNET AND TECHNOLOGY LAW DESK REFERENCE* (8th ed. 2007).

⁷⁸ David E Sorkin, *Unsolicited Commercial E-Mail and the Telephone Consumer Protection Act of 1991*, 45 *BUFFALO LAW REV.* 1001–1032 (1997), <http://repository.jmls.edu/cgi/viewcontent.cgi?article=1242&context=facpubs>.

⁷⁹ Tatyana Shcherbakova, Maria Vergelis & Nadezhda Demidova, *SPAM IN AUGUST 2014* (2014), <https://securelist.com/analysis/monthly-spam-reports/66647/spam-in-august-2014/> (last visited Feb 25, 2015).

⁸⁰ Neha Madaan, *INDIA RANKED 6TH IN SOURCE OF WORLD'S SPAM*, <http://timesofindia.indiatimes.com/tech/tech-news/India-ranked-6th-in-source-of-worlds-spam/articleshow/45514042.cms> (last visited Feb 25, 2015).

⁸¹ Rahul Donde, *SPAM : IS IT TIME TO LEGISLATE ?*, <http://www.legalservicesindia.com/articles/spamli.htm> (last visited Feb 25, 2015).

⁸² M Tariq Banday & Jameel A Qadri, *Spam-Technological and Legal Aspects*, 13 *KASHMIR UNIV. LAW REV.* 1–25 (2006), <http://arxiv.org/ftp/arxiv/papers/1112/1112.5621.pdf>.

Infosystems Pvt Ltd and its proprietor from transmitting unauthorized and unsolicited UBCE into the resources of VSNL.⁸³

D. Content regulation

Content regulations and compliance is extremely important for e-commerce ventures as these ventures distribute content or act as platform for distribution or exchange of third party information/content. Section 79 of the rules made under the IT (Amendment) Act 2008, intermediaries must observe due diligence to oversee appropriateness of all the contents. Moreover, the “intermediaries” of data are required to adhere to various duties and obligations and observe due diligence while dealing with information of third parties and in effect data that intermediaries themselves choose to publish.⁸⁴ To regulate content there are sufficient legislations in India which are discussed below.

1. Issue of Obscenity

Content of specific nature on the internet is prohibited by The Intermediary Guidelines Rules and an intermediary, such as a website host, is required to block such content.⁸⁵ According to the Intermediaries Guidelines Rules, intermediaries can be liable and: “shall not knowingly host or publish any information or shall not initiate the transmission, select the receiver of transmission, and select or modify the information contained in the transmission” for any information from “users” that is “grossly harmful, harassing, blasphemous, defamatory, obscene, pornographic, paedophilic, libelous, invasive of another's privacy, hateful, or racially, ethnically objectionable, disparaging, relating or encouraging money laundering or gambling, or otherwise unlawful in any manner whatever”.⁸⁶ These rules indirectly allow the Indian government to control content being published on the Internet. Although Indian government is unable to control content on the Internet, but by controlling the ISPs, it is giving itself enough powers to control access of its citizens to that content.⁸⁷ In a landmark case Avnish Bajaj vs. State

⁸³ PTI, DELHI HC RAPS FIRM OVER SPAM MAIL, <http://www.rediff.com/money/2004/jan/13spam.htm> (last visited May 19, 2015).

⁸⁴ Neha Chauhan, NEW STRINGENT IT RESTRICTIONS ON ONLINE CONTENT, CYBER CAFES, PERSONAL DATA USE EXPLAINED, CRITICISED, <http://www.legallyindia.com/201106062140/Regulatory/new-stringent-it-norms-on-privacy-online-content-cyber-cafes-explained-criticised> (last visited Feb 26, 2015).

⁸⁵ Chakshu Roy & Harsimran Kalra, RULES & REGULATIONS REVIEW, <http://www.prsindia.org/uploads/media/IT Rules/IT Rules and Regulations Brief 2011.pdf> (last visited Feb 22, 2015).

⁸⁶ Chauhan, *supra* note.

⁸⁷ Nikhil Pahwa, HOW THE INDIAN GOVERNMENT PLANS TO REGULATE ONLINE CONTENT & BLOGS,

(N.C.T.) of Delhi, Avnish Bajaj, CEO, Baze.com was arrested after an obscene MMS was listed for sale on Baze.com. Avnish was arrested under section 67 of the IT act 2000.⁸⁸

There are certain issues with the Intermediary Guidelines Rules; first, right to free speech is violated by blocking of content on the internet. Second, these rules differ from the requirements governing content of other media like newspapers and television.⁸⁹ Third, there are practical difficulties involved in bulk-blockage of internet content such as porn, as server of such websites reside outside India's jurisdictional limits and government has no locus standi to regulate content uploaded to these servers.⁹⁰

Obscenity issue is highlighted under section 292 of IPC, according to which "a book, pamphlet, paper, writing, drawing, painting, representation, figure or any other object, shall be deemed to be obscene if it is lascivious or appeals to the prurient interest or if its effect, or where it comprises two or more distinct items, the effect of any one of its items, is, if taken as a whole, such as to tend to deprave and corrupt person, who are likely, having regard to all relevant circumstances, to read, see or hear the matter contained or embodied in it". Violation would lead to imprisonment for a term up to 2 years and fine up to INR 2000 for the first time offenders and in case of second or subsequent conviction, imprisonment term increase to 5 years and fine up to INR 5000.

The Indecent Representation of Women (Prohibition) Act 1986 defines "indecent representation of women" as "the depiction in any manner of the figure of a woman; her form or body or any part thereof in such way as to have the effect of being indecent, or derogatory to, or denigrating women, or is likely to deprave, corrupt or injure the public morality or morals".⁹¹ This central law, which existed well before introduction of Sections 67 and 67A of the IT (Amendment) Act 2008 has been overshadowed by these two later provisions which were meant

<http://www.medianama.com/2011/02/223-indias-draft-blogger-guidelines/> (last visited Feb 26, 2015).

⁸⁸ S Muralidhar, AVNISH BAJAJ VS STATE (N.C.T.) OF DELHI, <http://indiankanoon.org/doc/309722/> (last visited May 20, 2015).

⁸⁹ Roy and Kalra, *supra* note.

⁹⁰ SFLC_ADMIN, SUPREME COURT DIRECTS ANTI - PORN PETITION TO BE PLACED BEFORE CYBER REGULATIONS ADVISORY COMMITTEE, <http://sflc.in/supreme-court-directs-anti-porn-petition-to-be-placed-before-cyber-regulations-advisor-y-committee/> (last visited Feb 26, 2015).

⁹¹ Indecent Representation of Women (Prohibition) Act 1986, , http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sro-new_delhi/documents/generi-cdocument/wcms_300630.pdf (last visited Feb 26, 2015).

specifically for digital publication.⁹² Individually, the IT Act offers very limited help to women depicted on the internet.

2. Cyber Defamation

The term defamation is used to define the injury that is caused to the reputation of a person in the eyes of a third person. The injury can be done by words oral or written, or by signs or by visible representations. Cyber defamation is publishing of defamatory material against another person with the help of computers or internet.⁹³ Cyber defamation can be committed through World Wide Web, discussion groups, intranets, mailing lists and bulletin boards and e-mails. Liability may fall on the primary publisher (e.g. web site content providers, e-mail authors etc.) or secondary party (internet service providers or bulletin board operators).⁹⁴

Section 66A of the IT (Amendment) Act 2008 clearly mentions punishment for sending offensive messages through communication services, causing insult, injury or criminal intimidation. Origin of such messages shall be punishable with imprisonment for a term which may extend to three years and with fine.

Section 499 of IPC has a provision of punishment of defamation as imprisonment for up to two years and/or with fine. Section 469 of IPC says that whoever commits forgery, intending that the document or electronic record forged shall harm the reputation of any party, or knowing that it is likely to be used for that purpose shall be punished with imprisonment of either description for a term which may extend to three years and shall also be liable to fine. Under section 501 of IPC printing or engraving matter known to be defamatory is also an offence and attracts punishment. Section 503 of IPC defines the offense of criminal intimidation by use of emails and other electronic means of communication.

In addition to other laws governing content in all media include provisions (including those for defamation, incitement to offence, obscenity etc.) in the Indian

⁹² Debarati Halder, *Examining the scope of Indecent Representation of Women (Prevention) Act, 1986 in the light of cyber victimisation of women in India*, 11 NATL. LAW SCH. J. 188–218 (2013), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2270061.

⁹³ HelplineLaw.com, CYBER DEFAMATION IN INDIA, <http://www.helplineLaw.com/employment-criminal-and-labour/CDII/cyber-defamation-in-india.html> (last visited Feb 27, 2015).

⁹⁴ Vivek Kumar Verma, CYBER DEFAMATION & LIABILITIES OF INTERNET SERVICE PROVIDERS (ISPS) AND INTERMEDIARY IN INDIA & UK [WWW.CORPORATRIX.WORDPRESS.COM](http://www.corporatrix.wordpress.com) 1–7, <https://indiancaselaws.files.wordpress.com/2014/04/cyber-defamation-liabilities-of-internet-service-providers-isps-and-intermediary.pdf> (last visited Feb 27, 2015).

Penal Code, the Cinematograph Act, the Copyright Act, the Broadcasting Regulations, the advertising code, etc..⁹⁵ Despite all these legislation India's is still facing trouble with monitoring of social media.⁹⁶

E. Intellectual property issues

Intellectual property refers to creations of the mind: inventions; literary and artistic works; and symbols, names and images used in commerce.⁹⁷ In the 20th century technological developments have transformed the majority of wealth-creating work from physical-based to knowledge-based. In this global environment work force, knowledge and expertise can be transported instantly and competitive advantage gained by one company can be eliminated overnight.⁹⁸ Under the agreement and obligations created by Trade Related Intellectual Property Rights (TRIPS), India has compiled the necessary statutes and amended the existing statues. Not just computer software but underlying design, contents, links, original text, audio, graphics on a web page are copyrighted and protected under Article 10 of the TRIPS agreement and Article 4 and 5 of WIPO Copyright Treaty.⁹⁹ Main form of intellectual property vis-a-vis e-commerce are *Copyrights*, which include content, design, software underlying the website and its platform; *Trademarks*, which include logos, taglines or words through which an e-commerce business is known. It also includes protecting trademarks of brands it sells through its platform; *Patents*, includes software functionality and methods underlying e-commerce.¹⁰⁰ The IT Act 2000 from the perspective of laws of copyright do not offer any concrete framework to tackle with specific copyright violations on the internet. However some aspect of copyright can be inferred from Section 43 of the Act which relates to penalty for damage to computer, computer system, etc.¹⁰¹

⁹⁵ The Hoot, CYBER RIGHTS FAQS,

<http://www.thehoot.org/web/home/cyber6.php?cid=52&sid=6276> (last visited Feb 26, 2015).

⁹⁶ Anita Babu, INDIA'S TROUBLE WITH MONITORING OF SOCIAL MEDIA CONTINUES,

http://www.business-standard.com/article/current-affairs/india-s-trouble-with-monitoring-of-social-media-continues-114121500487_1.html (last visited Feb 26, 2015).

⁹⁷ WIPO, WHAT IS INTELLECTUAL PROPERTY?,

http://www.wipo.int/edocs/pubdocs/en/intproperty/450/wipo_pub_450.pdf (last visited Feb 28, 2015).

⁹⁸ BITS-Pilani, INTELLECTUAL PROPERTY RIGHTS,

http://www.bits-pilani.ac.in/uploads/Patent_ManualOct_25th_07.pdf (last visited Feb 28, 2015).

⁹⁹ Aradhana Pandey, Ravi Mishra & Saumya Tripathi, IPR AND ENFORCEMENT MECHANISM,

<http://www.legalserviceindia.com/article/I260-IPR-And-Enforcement-Mechanism.html> (last visited Mar 20, 2015).

¹⁰⁰ WIPO, INTELLECTUAL PROPERTY ISSUES RELATED TO ELECTRONIC COMMERCE,

http://www.wipo.int/export/sites/www/sme/en/e_commerce/pdf/ip_e-commerce.pdf (last visited May 12, 2015).

¹⁰¹ Pandey, Mishra, and Tripathi, *supra* note.

Similarly, there is mention regarding tampering with computer source documents in Section 65 with an object to protect the intellectual property (computer source codes) invested in the computer.¹⁰²

Some of the major issues related to intellectual property rights in e-commerce are related to design of platform through third party, use of third party content on the website, use of hyperlinking, deep linking framing and meta tagging in pursuit of marketing goals and issue related to domain names. Here issues related to domain are highlighted and elaborated further.

A domain name is fantastic navigator to a company on the internet and the virtual image of business. It performs same functions online, as performed by trademark in the offline business dealings and transactions. As trademarks or service marks, the domain names are registered and protected at the entire global level supremely by only one organization known as ICANN (Internet Corporation for Assigned Names and Numbers), along with the National Trademark Law. There is no legislation in India which explicitly refers to dispute resolution in connection with domain names but under the Trade Marks Act of 1999 and the Trade Marks Rules of 2002 (and all amendments made in these so far), any person or business or professional entity may obtain protection to his/her/its newly created domain name in entire India.¹⁰³ One of the most crucial type of domain dispute prevalent around the world is *cyber-squatting*, a situation where, a mark or personal name as a domain name over internet is registered by the registrant with an intention to sell the names back to businesses to attain profit when they want to set up their own websites.^{104,105,106} First cybersquatting case in India was *Yahoo Inc. vs. Aakash Arora & Anr*, AIR 2000 Bom 27,¹⁰⁷ there have been other case like *Rediff*

¹⁰² Pradnya Paturkar, OFFENCES & PENALTIES UNDER THE IT ACT, 2000, <http://www.legalservicesindia.com/article/article/offences-&-penalties-under-the-it-act-2000-439-1.html> (last visited Mar 20, 2015).

¹⁰³ Hemant Goyal & Mohit Porwal, INDIA : PROTECTION OF DOMAIN NAME AS A TRADEMARK, <http://www.mondaq.com/india/x/327272/Trademark/Protection+of+Domain+Name+As+A+Trademark> (last visited Feb 28, 2015).

¹⁰⁴ Thekla Hansen-Young, *Whose Name is it, Anyway? Protecting Tribal Names from Cybersquatters*, 10 VIRGINIA J. LAW TECHNOL. 1–18 (2005), http://www.vjolt.net/vol10/issue3/v10i3_a6-Hansen-Young.pdf.

¹⁰⁵ Ashwin Madhavan, DOMAIN NAMES AND CYBERSQUATTING, http://www.indialawjournal.com/volume1/issue_2/article_by_ashwin.html (last visited Feb 28, 2015).

¹⁰⁶ John D Mercer, CYBERSQUATTING: BLACKMAIL ON THE INFORMATION SUPERHIGHWAY, <http://128.197.26.36/law/central/jd/organizations/journals/scitech/volume6/mercer.pdf> (last visited Feb 28, 2015).

¹⁰⁷ Prashant Mali, DOMAIN NAME DISPUTES AND LAW IN INDIA CSI COMMUNICATIONS 33 (2012), http://www.csi-india.org/c/document_library/get_file?uuid=5e9efaed-d7f5-447f-8bd8-2e67abd565a

Communication vs Cyberbooth & Anr 1999 PTC (19) 201 and Satyam Infoway Ltd. vs Sifynet Solutions Pvt. Ltd. AIR 2004 SC 3540. These disputes may be broadly categorized as, disputes between trademark and domain name owners and between domain name owners inter se. Careful examination of the judgments given by the courts in India reveals that protection available under the Act is stronger than internationally required and provided. But there are certain issues, for instance, the Trade Marks Act, 1999 itself is not extra territorial and may not allow for adequate protection of domain names. Secondly, Rule 2 of the UDNDR Policy requires the applicant to determine that the domain name for which registration is sought, does not infringes or violates someone else's rights. Thus, if the domain name, proposed to be registered, is in violation of another person's "trademark rights", it will violate Rule 2 of the Policy. In such an eventuality, the Registrar is within his right to refuse to register the domain name. This shows that a domain name, though properly registered as per the requirements of ICANN, still it is subject to the Trademarks Act, 1999 if a person successfully proves that he has 'rights' flowing out of the Act.¹⁰⁸ Cybersquatting has been prevalent in India since the advent of internet in the continent, as of now there has been no such law like that of the United States which prohibits Cybersquatting.¹⁰⁹ Harmonious application of the principles of the trademark law and the provisions concerning the domain names is required at present time.¹¹⁰

Because of vastness of internet the issue of IP infringement becomes rarified as dissemination and duplication of IP is instantaneous, easy and anonymous over World Wide Web and detecting infringer is difficult. On the issue of protection of intellectual rights (patents, trademarks, copyrights) including domain names the IT Act is silent,¹¹¹ but the IT Act in India, is enabled by other Acts to protect Intellectual Property infringements. For instance dispute resolution in connection with domain names is under the Trade Marks Act 1999,¹¹² which is in compliance with the TRIPS obligations. Substantial amendments have been done in 2012 in the Indian Copyright Act 1957¹¹³ to protect computer databases and software

c (last visited Feb 27, 2015).

¹⁰⁸ Priyanka Sharma, DOMAIN NAME PROTECTION IN INDIA, <http://cyberlawsinindia.blogspot.in/2010/02/domain-name-protection-in-india.html> (last visited Feb 28, 2015).

¹⁰⁹ Mali, *supra* note.

¹¹⁰ Praveen Dalal, DOMAIN NAME PROTECTION IN INDIA, http://www.naavi.org/cl_editorial_04/praveen_dalal/pd_domain_name_nov4.htm (last visited Feb 28, 2015).

¹¹¹ Rastogi, *supra* note.

¹¹² The Trade Marks Act 1999, , http://www.ipindia.nic.in/tmr_new/tmr_act_rules/TMRAct_New.pdf (last visited Feb 25, 2015).

¹¹³ Indian Copyright Act 1957, , <http://copyright.gov.in/Documents/CopyrightRules1957.pdf> (last

programs as “literary work”. Law governing patents in India i.e. the Patents (Amendment) Act 2005¹¹⁴ has been amended thrice since 1999 to comply under TRIPS.

F. Payment

Payments are the backbone of the economy; similarly, for successful evolution of e-commerce smooth payments payment mechanisms are vital. As compared to traditional payment methods electronic payment methods are complex and multi-player, involving buyer, seller, *payment processors* (constitute core functions involving clearing, payment and settlement), *intermediaries* (entities that collect monies received from customers for payment to merchants using any electronic/online payment mode, for goods and services availed by them and subsequently facilitate the transfer of these monies to the merchants in final settlement of the obligations of the paying customers)¹¹⁵ and *technology providers* (facilitate transmission of customer/merchant data, instructions, approvals, denials etc. through hardware and software). As illustrated in figure 4, online payment services poses complex practical challenges as it includes technological capabilities of service providers, commercial relationships, issues of regulation and law (buyer and seller protection), security considerations including identification issues, such as authentication and verification, and co-ordination among a variety of parties with different and sometimes competing interests.¹¹⁶ Existing payment instruments include credit cards/debit cards, mobile payments, electronic cash and conventional offline system like cash on delivery. Credit cards are not very popular in India and penetration of credit cards vis-a-vis total population is meager 2%.¹¹⁷ Both traditional and electronic payment systems in India are regulated by the Payment and Settlement Systems Act 2007¹¹⁸, which defines payment system as, “a system that enables payment to be effected between a payer and a beneficiary, involving clearing, payment or settlement services or all of them but does not include a stock exchange”. It is further fortified by RBI

visited Feb 27, 2015).

¹¹⁴ The Patents (Amendment) Act 2005, , http://ipindia.nic.in/ipr/patent/patent_2005.pdf (last visited Feb 27, 2015).

¹¹⁵ RBI, DIRECTIONS FOR OPENING AND OPERATION OF ACCOUNTS AND SETTLEMENT OF PAYMENTS FOR ELECTRONIC PAYMENT TRANSACTIONS INVOLVING INTERMEDIARIES, <http://rbidocs.rbi.org.in/rdocs/notification/PDFs/DOIPS241109.pdf> (last visited Mar 2, 2015).

¹¹⁶ OECD, ONLINE PAYMENT SYSTEMS FOR E-COMMERCE, <http://www.oecd.org/internet/ieconomy/36736056.pdf> (last visited Mar 2, 2015).

¹¹⁷ Sutherland Insights, INDIA CREDIT CARD MARKET OVERVIEW, <http://www.sutherlandinsights.com/india-credit-card-market-overview> (last visited Oct 10, 2014).

¹¹⁸ The Payment and Settlement Systems Act 2007, , <http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/86706.pdf> (last visited Feb 27, 2015).

guidelines which prevent security/privacy breach and control fictitious transactions but these guidelines also retard growth of e-commerce. Despite of these guidelines, in 2014, Uber Technologies, a US based taxi hailing company used an overseas gateway to conduct transactions, and violated Indian regulations by "bypassing" rules. Uber used customer's stored credit card information and directly processed payments, and did not follow two-step verification which is essential for all e-commerce transactions in India.¹¹⁹ Further, lack of consumer trust in online merchants has forced companies to offer cash-on-deliver, which has created a whole new market for e-commerce in India.¹²⁰ But CoD (cash on delivery) services significantly increase financial costs (labor, cash handling and higher returns of purchased items) which act as impediment in disguise.¹²¹

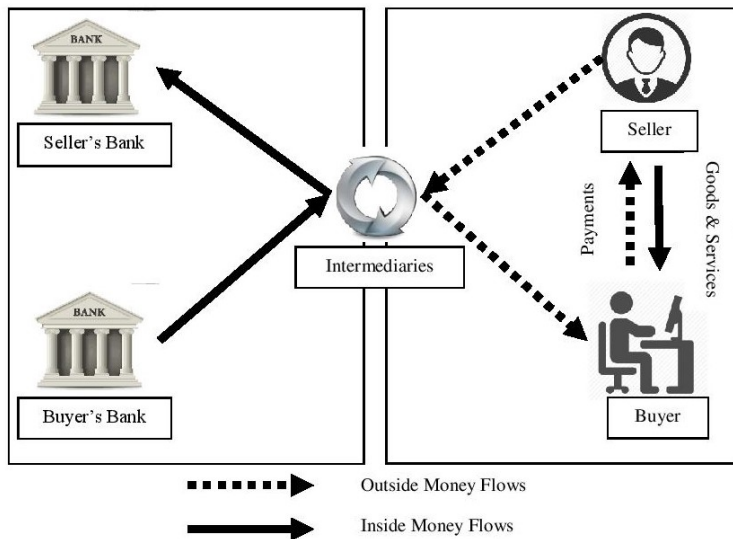


Figure 4. Electronic Payment System.

Source: Sumanjeet (2009)

¹¹⁹ Suvashree Choudhury, INDIA WORKING TO FIX E-COMMERCE PAYMENTS POST-UBER CASE, <http://in.reuters.com/article/2014/12/27/india-rbi-uber-idINKBN0K505F20141227> (last visited May 23, 2015).

¹²⁰ Satya Krishna Ganni, HOW THE GROWTH OF INDIAN E-COMMERCE WILL END BY 2016, <http://trak.in/tags/business/2015/02/18/indian-e-commerce-growth-mcommerce/> (last visited Feb 19, 2015).

¹²¹ PWC, *supra* note.

The Indian IT Act is not equipped to handle issues like high transaction costs of cross-border operations (tax and regulatory issues) and security risks. Secondly, even when the payment systems are domestically well equipped, they are not available internationally or become too costly or complicated. Third, CoD can only be offered to domestic customers and to buy internationally customers have to risk their money and privacy. Fourth, additional service costs and currency fluctuations can increase the transaction costs of cross-border payments. A recent study revealed that consumers' concerns related to payment security, data protection and the fear of online fraud are particularly high in case of international transactions.¹²² Lastly, very often customer are not able to determine responsible parties for addressing any problems that arise, the procedures for seeking redress, and the types of remedies that may be obtained.¹²³

Payment related issues can be significantly checked, for instance customer will not mind additional cost if they know that the payment method being used is trustworthy. Secondly, customers can be educated regarding safety rules for on-line payments and about their rights and obligations when numbers of parties (such as mobile operators, Internet service providers, and social media) are involved in a transaction.¹²⁴ Third, international co-operation in enforcement of security rules for electronic transactions can be strengthened.¹²⁵ Present online payments mechanisms and internet banking system are not up to the mark and invite cyber-crimes and financial frauds. The Reserve Bank of India (RBI) has issued strict warning to Indian banks and financial intermediaries to ensure cyber security.¹²⁶

¹²² EC, REPORT ON CROSS-BORDER E-COMMERCE IN THE EU, http://ec.europa.eu/consumers/archive/strategy/docs/com_staff_wp2009_en.pdf (last visited Mar 2, 2015).

¹²³ OECD, CONSUMER POLICY GUIDANCE ON MOBILE AND ONLINE PAYMENTS, <http://www.oecd-ilibrary.org/docserver/download/5jz432c11ns7.pdf?expires=1424496555&id=id&acname=guest&checksum=AA23E0250AAA1D870A5F8760CAB7B9B7> (last visited Feb 21, 2015).

¹²⁴ *Id.*

¹²⁵ OECD, ELECTRONIC AND MOBILE COMMERCE, <http://www.oecd-ilibrary.org/docserver/download/5k437p2gxw6g.pdf?expires=1424497530&id=id&acname=guest&checksum=4FF60849320F273DAAF88E35690C9282> (last visited Feb 21, 2015).

¹²⁶ Perry4Law Techno Legal Base, ONLINE SHOPPING IN INDIA : LEGAL AND CYBER SECURITY ISSUES, <http://ecommercelawsinindia.blogspot.in/2012/03/online-shopping-in-india-legal-and.html> (last visited Oct 5, 2014).

G. Taxation of e-commerce transactions

Assessing tax and collecting revenue for transactions carried over cyberspace is difficult because of rapid technological developments, absence of boundaries and intangible nature of transactions in goods/services.¹²⁷ The Organization for Economic Cooperation and Development (OECD) highlighted guiding principles for the taxation of e-commerce transaction, i.e. neutrality, efficiency, certainty and simplicity, effectiveness and fairness and flexibility.¹²⁸ Introduction of separate tax regime for e-commerce transactions was excogitated by the High Powered Committee (HPC) constituted by the Central Board of Direct Taxes, but quoting principle of 'neutrality', HPC maintained that no separate regime for the taxation of e-commerce transactions is required and existing laws are sufficient.¹²⁹ To get a piece of growing e-commerce revenue, Indian states are looking at ways to tax e-commerce transactions. Tax laws are trying to keep pace with evolving business models and corporate structures, especially in the context of most large e-commerce companies boasting marketplace models.¹³⁰ Still, India is struggling with taxation issues which are highlighted and discussed below on the basis of two broad classifications of taxes¹³¹ -

1. Direct Taxes

The Income Tax Act 1961 governs taxation of income in India. Residents are subject to tax in India on their worldwide income, whereas non-residents are taxed only on income sourced in India. There are two main issues with respect to income generated by non-residents from e-commerce transactions, first is *Characterization of income* i.e. whether income earned with respect to the use or sale of goods (particularly items such as software and electronic databases) and sale of advertising space etc. is royalty or business income or capital gains.¹³² Since characterization of income by Indian tax authorities is not in consonance with international principles, non-residents could potentially face the risk of double

¹²⁷ Arya Mukesh, AUDITING E-TAXATION INTO IT 34–39 (2009), http://intosaiitaudit.org/intoit_articles/18p36top41.pdf (last visited Mar 5, 2015).

¹²⁸ OECD, TAXATION AND ELECTRONIC COMMERCE: IMPLEMENTING THE OTTAWA TAXATION FRAMEWORK CONDITIONS, [http://www.oecd.org/tax/consumption/Taxation and eCommerce 2001.pdf](http://www.oecd.org/tax/consumption/Taxation%20and%20eCommerce%202001.pdf) (last visited Feb 21, 2015).

¹²⁹ Nishith Desai Associates, *supra* note.

¹³⁰ Livemint.com, STATES LOOK TO PLUG TAX GAPS IN E-COMMERCE, <http://www.livemint.com/Politics/VTh4Ud2Zrxgmp2XOWTQKCK/States-look-to-plug-tax-gaps-in-e-commerce.html> (last visited Mar 5, 2015).

¹³¹ Vitt.in, ALL INDIAN TAXES (2015), <http://www.vitt.in/taxes.html> (last visited Mar 8, 2015).

¹³² OECD, TAX TREATY CHARACTERISATION ISSUES ARISING FROM E-COMMERCE, <http://www.oecd.org/tax/consumption/1923396.pdf> (last visited Mar 7, 2015).

taxation. For example, definition of royalty under the ITA is wider than the internationally accepted definition. In addition, issues like payments made for the maintenance of software, website hosting, data warehousing, data retrieval, delivery of high value data etc., have not yet been tested in the court of law yet, and the characterization of such transactions is still uncertain (Director Income Tax v. Nokia Networks OY (2012) 253 CTR (Del) 417; DDIT vs. Reliance Infocomm Ltd/Lucent Technologies, 2013 (9) TMI 374; Standard Chartered Bank v. DDIT, (2011) 11 taxmann.com 105 (MUM); Dell International Services (India) Pvt. Ltd., In re, 305 ITR 37 (AAR); Cable and Wireless Networks India (P) Ltd., In re, 315 ITR 72 (AAR); Yahoo India Pvt. Ltd. v. DCIT, ITA No.506/Mum/2008; Pinstorm Technologies Pvt Ltd v. ITO, TS 536 ITAT (2012) Mum; ITO v. Right Florists Ltd, I.T.A. No.: 1336/ Kol/ 2011).

Second is a *permanent establishment (PE) issue* that may arise due to the presence of a server/other electronic terminal in India, hosting of websites or other technical equipment, etc..^{133,134} Due to intangible nature of transactions in e-commerce establishing the existence of PE is difficult. Indian tax authorities assert that a website could constitute a PE in certain circumstances and have expressed reservations to the OECD commentary in this regard (Amadeus Global Travel v. Deputy Commissioner Income Tax, (2008) 19 SOT 257, Delhi).

2. Indirect taxes

Indirect tax is the charge that is collected by intermediary and passed on to the government, from the individual who actually suffers the economic burden of the tax.¹³⁵ In India, e-commerce and internet-based business models are taxed in a way which conflicts with international approaches. Laws regulating e-commerce in India are still evolving and lack clarity.¹³⁶ The IT Act of India is silent on indirect taxation of electronic transactions and issues like customs duty for cross border sales, sales tax, etc. of goods and services delivered electronically are not clearly spelled out.¹³⁷ Main indirect taxes levied are limned below -

¹³³ OECD, THE IMPACT OF THE COMMUNICATIONS REVOLUTION ON THE APPLICATION OF “PLACE OF EFFECTIVE MANAGEMENT” AS A TIE BREAKER RULE, <http://www.oecd.org/ctp/treaties/1923328.pdf> (last visited Mar 7, 2015).

¹³⁴ OECD, ATTRIBUTION OF PROFIT TO A PERMANENT ESTABLISHMENT INVOLVED IN ELECTRONIC COMMERCE TRANSACTIONS, <http://www.oecd.org/tax/treaties/1923312.pdf> (last visited Mar 7, 2015).

¹³⁵ ACE Legal, INDIRECT TAXES, <http://www.consultacelegal.com/knowledge-center/indirect-taxes> (last visited Feb 22, 2015).

¹³⁶ PWC, *supra* note.

¹³⁷ Rastogi, *supra* note.

- Service Tax – There is no exempt on any specific kind of e-commerce transactions. The location of the receiver is treated as the place where service is delivered.
- Sales Tax - In context of e-commerce transactions, the Supreme Court has held that intangible goods such as software put in a tangible media, technical knowhow and other IPRs are goods for the purpose of sales tax.¹³⁸ A survey within the EU put in foreground consumption taxes (such as VAT) as most pressing impediment for small and medium enterprises involved in e-commerce. These small firms have no expertise in negotiating with bureaucratic complexity of foreign systems.¹³⁹
- Customs Duty – In India, any fees paid as royalties or license fee must be added to the customs value. In case of embedded copyrightable software, the value of the software, only if invoiced separately, is added to the valuation of the equipment for purposes of customs duty.¹⁴⁰
- Excise Duty - Excise duty is payable on non-customized software but exempt on customized software which originates in India.

The taxation issues have caught attention both at international and national levels and governments and authorities are exploring remedial measures. The Committee on Fiscal Affairs (under OECD) specifically identified certain work topics and issues. These include direct tax issues and allocation of income, consumption tax issues, the role of technology-based systems in tax collection and tax administration issues, the means to address significant compliance challenges and exploiting taxpayer service opportunities.^{141, 142, 143} The High Powered Committee (HPC) of Ministry of Finance, India acknowledged need of high level of preparedness of the tax administrators to cope with the advent of e-commerce

¹³⁸ The Customs Act 1962, , [http://odishapolice.gov.in/sites/default/files/PDF/The Customs Act 1962.pdf](http://odishapolice.gov.in/sites/default/files/PDF/The%20Customs%20Act%201962.pdf) (last visited Mar 9, 2015).

¹³⁹ EC, *supra* note.

¹⁴⁰ Nishith Desai Associates, *supra* note.

¹⁴¹ OECD, TAX ADMINISTRATION ASPECTS OF ELECTRONIC COMMERCE: RESPONDING TO THE CHALLENGES AND OPPORTUNITIES, <http://www.oecd.org/tax/treaties/1923272.pdf> (last visited Feb 21, 2015).

¹⁴² Collin Lau & Andrew Halkyard, FROM E-COMMERCE TO E-BUSINESS TAXATION ASIA-PACIFIC TAX BULLETIN 2–13 (2003), <http://unpan1.un.org/intradoc/groups/public/documents/unpan/unpan008624.pdf> (last visited Mar 7, 2015).

¹⁴³ OECD, CONSUMPTION TAX ASPECTS OF ELECTRONIC COMMERCE, <http://www.oecd.org/tax/consumption/2673667.pdf> (last visited Mar 7, 2015).

and tried to address enforcement challenge in their report "Taxation and E-Commerce". Issues mentioned in the report are, identity and location of parties, anonymity of transactions and accounts, dis-intermediation, transfer pricing issues, online delivery and net cash, easy access to tax havens and low tax jurisdictions, identification of taxing jurisdiction, new evasion opportunities, recovery of tax, exchange of information and tax payer service opportunities.¹⁴⁴ Since e-commerce can happen over internet which is ubiquitous in nature, taxation and dispute related to e-commerce can span multiple countries as transactions at different levels may depend on resources situated in various countries. A stronger international legal framework is necessary for successful e-commerce on regional level.¹⁴⁵ Complexity related to taxes for firms selling goods and services abroad can be reduced via agreements between states or by providing domestic firms with assistance in navigating the requirements in foreign jurisdictions.¹⁴⁶ Concept of "trusted traders" has been introduced by the European Commission; where trusted traders are have privileges like trade facilitations, faster border crossing, and fewer physical inspections.¹⁴⁷

E-commerce businesses catering to wide variety of audience find it difficult to manage and to stay compliant to the laws because of interpretation of intricate tax norms and complex inter-state taxation rules. To unleash the potential of e-commerce and to increase efficiency in operations, creation of jobs, growth of the industry and investments in back-end infrastructure, a favorable regulatory environment is essential.¹⁴⁸ Taxes on e-commerce are regulated by extension of the current tax laws. To develop an all-inclusive framework for e-commerce the IT Act has to be revisited.¹⁴⁹

H. Intermediary liability

Under section 2 (w) of the IT (Amendment) Act 2008, intermediary is defined as - "intermediary", with respect to any particular electronic records, means any person who on behalf of another person receives, stores or transmits that record or provides any service with respect to that record and includes telecom service

¹⁴⁴ Rashminsanghvi.com, ENFORCEMENT ISSUES IN ELECTRONIC COMMERCE, http://www.rashminsanghvi.com/downloads/taxation/international-taxation/bpo_taxation_in_india/Chapter_3-Enforcement_Issues_in_Electronic_Commerce.pdf (last visited Mar 6, 2015).

¹⁴⁵ Rastogi, *supra* note.

¹⁴⁶ OECD, *supra* note.

¹⁴⁷ Stefan Henningsson et al., *The Next Generation Information Infrastructure for International Trade*, 6 J. THEOR. APPL. ELECTRON. COMM. RES. 1–15 (2011).

¹⁴⁸ PWC, *supra* note.

¹⁴⁹ Kirti Agrawal & Namrata Agrawal, *Impact of E-commerce on Taxation*, 4 INT. J. INF. COMPUT. TECHNOL. 99–106 (2014).

providers, network service providers, internet service providers, web-hosting service providers, search engines, online payment sites, online-auction sites, online-market places and cyber cafes. When the IT Act 2000 was incorporated legislators had this mindset that private commercial transactions will subject to fewer burdens than government-related interactions. But arrest of Avnish Bajaj, CEO of Baazee.com (caused by e-commerce posting generated by a third-party user of the site) forced legislators to rethink about modernizing the IT Act to cope up with advent of intermediaries and pacing e-commerce developments.¹⁵⁰ This led to emergence of the IT (Amendment) Act 2008. Liability regime for Indian online intermediaries, are covered by two key legislations i.e. the IT (Amendment) Act 2008 and the Copyright Act (as amended in 2012), supplemented by the Information Technology (Intermediary guidelines) Rules, which act as secondary legislation.¹⁵¹ Scenario for intermediaries in India was very bad before the IT (Amendment) Act 2008.¹⁵² The Indian government has granted intermediaries a conditional safe harbor under section 79 of the IT Act by providing that an intermediary is not liable for any third-party content hosted/made available through such intermediary under certain circumstances.¹⁵³ An e-commerce company can pre-empt any liability arising by virtue of providing a platform for third parties, by following these guidelines (MySpace was found guilty of primary copyright infringement, in the case of Super Cassettes Industries Ltd. Vs. Myspace Inc. and Anr. (2011(48) PTC49 (Del)).

As per text approved under the IT (Amendment) Act 2008, there are still lots of differences in law in India and the EU.¹⁵⁴ For instance differences in ISP

¹⁵⁰ Apar Gupta, LIABILITY OF INTERMEDIARIES IN INDIA? FROM TROUBLED WATERS TO SAFE HARBORS, http://www.supremecourtcases.com/index2.php?option=com_content&itemid=1&do_pdf=1&id=6648 (last visited Mar 10, 2015).

¹⁵¹ Martin Hvidt Thelle et al., CLOSING THE GAP-INDIAN ONLINE INTERMEDIARIES AND A LIABILITY SYSTEM NOT YET FIT FOR PURPOSE COPENHAGEN ECONOMICS 1–38 (2014), [http://www.globalnetworkinitiative.org/sites/default/files/Closing the Gap - Copenhagen Economics_March 2014_0.pdf](http://www.globalnetworkinitiative.org/sites/default/files/Closing%20the%20Gap%20-%20Copenhagen%20Economics_March%202014_0.pdf) (last visited Mar 10, 2015).

¹⁵² Alaya Legal, INDIA: INTERMEDIARIES UNDER THE INFORMATION TECHNOLOGY (AMENDMENT) ACT 2008, <http://www.mondaq.com/india/x/225328/Telecommunications+Mobile+Cable+Communications/Intermediaries+Under+The+Information+Technology+Amendment+Act+2008> (last visited Mar 10, 2015).

¹⁵³ Smitha Krishna Prasad, Rakhi Jindal & Vivek Kathpalia, INTERMEDIARIES-MESSENGERS OR GUARDIANS ? HOW INDIA AND US DEAL WITH THE ROLE AND LIABILITY OF INTERMEDIARIES U.S.-INDIA BUSINESS COUNCIL'S LEGAL SERVICES NEWSLETTER 5–6 (2013), [http://www.nishithdesai.com/fileadmin/user_upload/pdfs/Research Articles/Intermediaries - Messengers_or_Guardians.pdf](http://www.nishithdesai.com/fileadmin/user_upload/pdfs/Research%20Articles/Intermediaries_-_Messengers_or_Guardians.pdf) (last visited Mar 10, 2015).

¹⁵⁴ Thelle et al., *supra* note.

liability laws in India and the US have led to continue trade-relation barriers.¹⁵⁵ Although efforts have been made in the form of the IT (Intermediary guidelines) Rules, but still there are plenty of gaps that are required to be plugged in so that the intermediaries can operate without inhibitions.¹⁵⁶ For instance, the language in the guidelines is too generic to provide univocal guidance to industry, enforcers and citizens. This creates mismatch between; actual and assumed definition of legality between users, who access content and users who create content via an intermediary; procedures that are to be followed between online intermediaries and aggrieved parties and interpretation of law among different partners of enforcement community. Secondly, Intermediaries are given very short time to react (36 hours for first reaction); in case it receives notice regarding third party content. Third, an unclear or unjustified notification can put intermediary in dilemma of choice between rights and wrong. Fourth, the Copyright Act, as amended in 2012 is relevant to online intermediaries as they involve transmission of third party content, but great deal of ambiguity in interpretation of law has been observed and conditions under which intermediaries are protected against liability are unclear. This problem can be attributed to mismatch between copyright and the IT Act legislation.¹⁵⁷

Across the globe updating rules in pace with rapid technological developments is very difficult for the policy makers. The IT (Intermediary guidelines) Rules need to be revisited, which may include, statements explicitly specifying the imperative to safeguard intermediaries from liability where a third party is the source of the content at stake and qualified immunity for intermediaries, if they are complying with court orders. Secondly, clarity in written legislation should be sought to remove heterogeneity between state and local level enforcement. Third, a legal framework should be made which ensures clear expectations by aggrieved parties and clear compliance by intermediaries, with regard to legal remedy.¹⁵⁸

I. Jurisdiction issues

Business disputes for an e-commerce business/enterprise can be *contractual disputes* (between B2B and B2C) or *non-contractual disputes* (copyright, data

¹⁵⁵ Aakanksha Kumar, *Internet Intermediary (ISP) Liability for Contributory Copyright Infringement in USA and India : Lack of Uniformity as a Trade Barrier*, 19 J. INTELLECT. PROP. RIGHTS 272–281 (2014), [http://nopr.niscair.res.in/bitstream/123456789/29290/1/JIPR 19\(4\) 272-281.pdf](http://nopr.niscair.res.in/bitstream/123456789/29290/1/JIPR 19(4) 272-281.pdf).

¹⁵⁶ Alaya Legal, *supra* note.

¹⁵⁷ Thelle et al., *supra* note.

¹⁵⁸ *Id.*

protection, right of free expression and competition law and domain name disputes).¹⁵⁹¹⁶⁰ A court can hear on a matter if it has both *subject-matter jurisdiction* (court's authority to decide a particular type of dispute) and *personal jurisdiction* (territorial jurisdiction determined by residence of the parties). Due to borderless nature of internet 'territorial' jurisdiction gets complex; moreover in relation to diverse categories of disputes, issues such as jurisdiction, choice of law and high cost of cross-jurisdictional litigation arise.¹⁶¹ There are certain loopholes in the IT Act such as ambiguity with respect to legal jurisdiction of contracts involving international parties¹⁶² and absence of dual-key pairs for individuals and business, compromising confidentiality of e-transactions.¹⁶³¹⁶⁴ In India jurisdiction and enforcement issues pertaining e-commerce are still nascent.¹⁶⁵ But there are certain incidences where court has assumed jurisdiction over a matter in preliminary stages (SMC. Pneumatics (India) Pvt. Ltd. vs. Jogesh Kwatra, Suit No. 1279/2001)

With respect to jurisdiction, Section 1(2) of the IT Act 2000 reads as, "It shall extend to the whole of India and, save as otherwise provided in this Act, it applies also to any offence or contravention there under committed outside India by any person".¹⁶⁶ Section 75 further strengthen the Act regarding its application for offence or contravention committed outside India, and reads as under, "(1) Subject to the Provisions of Sub-section (2), the provisions of this Act shall apply also to any offence or contravention committed outside India by any person irrespective of his nationality. (2) for the purposes of Sub-section (1), this Act shall apply to an offence or contravention committed outside India by any person if the act or conduct constituting the offence or contravention involves a computer, computer system or network located in India".

For enforcement of laws under the IT Act 2000, there is provision for appointment of Controller of Certifying Authorities (Section 17), adjudicating officers (Section 46) and one or more Cyber Appellate Tribunals (Chapter 10).

¹⁵⁹ Sachin Mishra, DETERMINING JURISDICTION OVER E-COMMERCE DISPUTES IN INDIA MANUPATRA 1–17 (2014), <http://www.manupatra.co.in/newslines/articles/Upload/FE4BA350-DBEF-49DA-97D4-09E54ED8B813.pdf> (last visited Mar 11, 2015).

¹⁶⁰ Kah-Wei Chong & Len Kardon, E-COMMERCE: AN INTRODUCTION- DISPUTES, <http://cyber.law.harvard.edu/ecommerce/disputes.html> (last visited Mar 12, 2015).

¹⁶¹ Mishra, *supra* note.

¹⁶² Agrawal and Agrawal, *supra* note.

¹⁶³ *Id.*

¹⁶⁴ Rastogi, *supra* note.

¹⁶⁵ Nishith Desai Associates, *supra* note.

¹⁶⁶ Rajesh Tandon, ROLE OF JUDGES AND PROSECUTORS IN COMBATING WITH CYBER CRIMES, http://catindia.gov.in/writereaddata/ln_4pfyqO111912012.pdf (last visited Mar 11, 2015).

Primary function of the controller is to regulate certifying authorities issuing digital signature certificates (Section 18). To settle disputes between subscribers and certifying authorities Controller is empowered with quasi-judicial powers.¹⁶⁷ Contraventions of any provisions outlined in Chapter 9 are adjudged by adjudicating officers, who has Civil Court powers. Cyber Appellate Tribunal (CAT) was established by Central Government in accordance with the provisions contained under Section 48, under the aegis of Controller of Certifying Authorities. Cyber Appellate Tribunal has same powers as are vested in a civil court but it's guided by principles of natural justice. Appeal can be made before the Tribunal, if any person is aggrieved by an order made by the Controller or by an Adjudicating Officer. A further appeal can be made to High Court.

Section 3 of IPC mention about punishment of offences committed beyond but which by law may be tried within India, and read as under, "Any person liable, by any Indian law to be tried for an offence committed beyond India shall be dealt with according to the provisions of this code for any act committed beyond India in the same manner as if such act had been committed within".¹⁶⁸

In terms of international jurisdiction legal provisions available in India provide "*long arm jurisdiction*" to create personal jurisdiction over business transactions of non-residents. At times countries enforce other countries law out of friendly civility i.e. *judicial comity*.¹⁶⁹ Legal differences have been highlighted as major barriers to e-commerce and cross-border trade under different studies.¹⁷⁰ There are large number of laws and provisions under judiciary which overlap, or in certain cases don't cover all issue areas.¹⁷¹

Four considerations i.e. power, effect, legitimacy and notice, which work well in physical world, do not translate effectively in virtual and borderless world of e-commerce. Therefore governments, who wish to enforce laws with respect to online business must establish jurisdiction over the conduct.¹⁷² Secondly, there are two ways in which a sovereign can extend its prescriptive jurisdiction beyond its enforcement jurisdiction i.e. a sovereign can ask other sovereign to enforce its judgments or apply its laws under certain condition.¹⁷³ Third, both buyer and seller seek dependable and inexpensive resolution process and different techniques can be

¹⁶⁷ Abhilash, *supra* note.

¹⁶⁸ The Indian Penal Code 1860, , <http://www.icf.indianrailways.gov.in/uploads/files/The Indian Penal Code.pdf> (last visited Feb 27, 2015).

¹⁶⁹ SCHNEIDER, *supra* note.

¹⁷⁰ OECD, *supra* note.

¹⁷¹ *Id.*

¹⁷² SCHNEIDER, *supra* note.

¹⁷³ Chong and Kardon, *supra* note.

deployed to achieve a workable and most acceptable solution, like credit card charge back mechanism, merchant complaint resolution mechanism or complaints to governmental authorities and consumer protection agencies. Online dispute resolution (ODR) may become successful as virtual small claims courts offering the advantage of speed, reduced cost, greater convenience and accessibility and deploy dispute resolution techniques (arbitration, mediation, negotiation) through assisted software or rules. Some providers are using "peer pressure" technique also.¹⁷⁴ Fourthly, information centers can be established by policy makers to provide information to buyers and sellers regarding regulations and procedures involved in trans-border e-commerce activity.¹⁷⁵ Fifth, policy aspects related to e-commerce activities can be included in regional trade agreements.¹⁷⁶ Lastly, along with the strengthening of the legal and statute framework, efficient and comprehensive infrastructure has to be built for monitoring of all e-commerce transactions.¹⁷⁷

J. Consumer protection issues

In India, with regard to consumer protection, there is no separate consumer protection law which is specifically regulating online transaction, therefore the IT Act rely on the Consumer Protection Act 1986¹⁷⁸ which governs the relationship between consumers and goods/ service providers. Any service which is delivered free of charge, do not fall under the scope of CPA, 1986. Various remedial actions that can be imposed under CPA are removal of defects/ deficiencies, replacement of goods, return of price paid, compensations and discontinuation of unfair trade practice or the restrictive trade practice or not to repeat them. There are almost no watchdogs in the form of consumer NGOs in India, but one such agency is Citizen Consumer and Civic Action Group (CAG). CAG conducted a study in 2001 which highlighted numerous issues like privacy of information, provision of contract terms such as guarantees/ warranties, refunds, dispute settlement, hidden costs and misleading information and other problems.¹⁷⁹ On international sphere Organization for Economic Co-operation and Development identified five key consumer protection issues in respect to e-commerce, which are information

¹⁷⁴ *Id.*

¹⁷⁵ OECD, *supra* note.

¹⁷⁶ *Id.*

¹⁷⁷ Agrawal and Agrawal, *supra* note.

¹⁷⁸ The Consumer Protection Act 1986, , http://dc-siwan.bih.nic.in/Consumer_Act.pdf (last visited Mar 2, 2015).

¹⁷⁹ CAG, E-COMMERCE AND CONSUMER PROTECTION IN INDIA, <http://dealsothon.blogspot.in/2014/07/e-commerce-and-consumer-protection-in.html> (last visited Jul 20, 2014).

disclosure, fraud and misleading commercial practices, privacy issues, dispute resolution and redress.¹⁸⁰

OECD Committee on Consumer Policy suggested guiding principles that apply only to business-to-consumer electronic commerce, covering transparent and effective protection, fair business, advertising and marketing practices, online disclosures, confirmation process, payment, dispute resolution and redress, privacy and education and awareness.¹⁸¹

V. Discussion - ODR an alternative approach

In country like India, where more than 30 million civil and criminal court cases are pending,¹⁸² an alternative and efficient litigation system is urgently required. Because of delay in justice, litigation is the least favored method for resolution in business to business (B2B) or business to customer (B2C) disputes. Alternative Dispute Resolution (ADR) methods like mediation, conciliation and arbitration are gaining grounds but these methods also have limitations, as they requires physical presence of both parties and the arbitrator/conciliator/mediator.¹⁸³ In such scenario, Online Dispute Resolution (ODR) can play significant role in settling B2C, B2B, C2C, B2G, intellectual property, insurance, other financial, auctions, domain name, copyright, e-banking and privacy issues in cyberspace.^{184,185,186} ODR is getting popular because of its speed, convenience, ease of access, efficiency, cost effectiveness, its reach across borders and easy storage of digital data.^{187,188} Clark, Cho and Hoyle mentioned a generic eight step

¹⁸⁰ OECD, *supra* note.

¹⁸¹ OECD, GUIDELINES FOR CONSUMER PROTECTION IN THE CONTEXT OF ELECTRONIC COMMERCE, <http://www.oecd.org/internet/consumer/34023235.pdf> (last visited Mar 2, 2015).

¹⁸² PTI, MORE THAN 3 CRORE COURT CASES PENDING ACROSS COUNTRY, <http://www.ndtv.com/india-news/more-than-3-crore-court-cases-pending-across-country-709595> (last visited May 27, 2015).

¹⁸³ Anurag K Agarwal, IS INDIA READY FOR ONLINE DISPUTE RESOLUTION? IIM AHMEDABAD W.P. No.2006-10-03 1–17 (2006), http://www.iimahd.ernet.in/publications/data/2006-10-03_aagarwal.pdf (last visited May 27, 2015).

¹⁸⁴ *Id.*

¹⁸⁵ United Nations, ONLINE DISPUTE RESOLUTION: E-COMMERCE AND BEYOND E-COMMERCE AND DEVELOPMENT REPORT 177–203 (2003), http://unctad.org/en/Docs/ecdr2003ch7_en.pdf (last visited May 28, 2015).

¹⁸⁶ Thomas Schultz, *Does Online Dispute Resolution Need Governmental Intervention? The Case for Architectures of Control and Trust*, 6 NORTH CAROLINA J. LAW TECHNOL. 71–106 (2004).

¹⁸⁷ Eugene Clark, George Cho & Arthur Hoyle, *Online Dispute Resolution: Present Realities, Pressing Problems and Future Prospects*, 17 INT. REV. LAW, COMPUT. TECHNOL. 7–25 (2003).

¹⁸⁸ Zheng Tang, *An effective dispute resolution system for electronic consumer contracts*, 23 COMPUT. LAW SECUR. REP. 42–52 (2007).

ODR process which includes, initial contact, initiation of dispute resolution process, assessment and checklist formation, information exchange, formal lodgement, question and answer by parties, facilitation and decision.¹⁸⁹ Currently ODR has three approaches; cyberspace (which focuses on Internet and information technology), non-adjudicative ADR (focuses on negotiation, mediation, and improving communications and relationships between parties) and arbitration (focuses on rights and applications of law with an arbitrator's decision).¹⁹⁰ Arbitration is being used at National Internet Exchange of India (NIXI), but other two approaches are not very popular in India.¹⁹¹

Although ODR is an effective method for resolving e-commerce disputes, but it can work efficiently only if minimal conditions are fulfilled i.e. information to consumer, consent of both parties to submit the dispute to third party, neutrality of third party and compliance with the legal requirements.¹⁹² There are other hurdles like access, technology, cultural and language issues, and trust in new untested system.¹⁹³ As mentioned earlier, to reap benefits through ODR, a sound techno-legal base is essential. Xu and Yuan proposed principle-based dispute resolution system to determine liability and responsibility of parties regarding payments or adjustments resulting from the dispute.¹⁹⁴ Basic principles of this system include government laws, industrial self-regulation, and contracts agreed by parties. Similarly, Schultz also contended for governmental intervention in ODR process.¹⁹⁵ Understanding the role of government, India enacted the IT Act 2000 to give formal and legal recognition to e-commerce and e-governance. Further, traditional arbitration law has been reformulated as the Arbitration and Conciliation Act 1996, which is in synchronization with standards of the UNCITRAL Model and the Code of Civil Procedure 1908 has been amended to introduce section 89 for methods of alternative dispute resolution (ADR) in India.¹⁹⁶

¹⁸⁹ Clark, Cho, and Hoyle, *supra* note.

¹⁹⁰ Agarwal, *supra* note.

¹⁹¹ *Id.*

¹⁹² Anne Salaun, *Consumer Protection- Proposals for Improving the Protection of Online Consumers*, 15 COMPUT. LAW SECUR. REP. 159–167 (1999).

¹⁹³ Agarwal, *supra* note.

¹⁹⁴ Zhengchuan Xu & Yufei Yuan, *Principle-based dispute resolution for consumer protection*, 22 KNOWLEDGE-BASED SYST. 18–27 (2009), <http://dx.doi.org/10.1016/j.knosys.2008.04.009>.

¹⁹⁵ Schultz, *supra* note.

¹⁹⁶ Chitranjali Negi, *CONCEPT ONLINE DISPUTE RESOLUTION IN INDIA*, <http://dx.doi.org/10.2139/ssrn.2596267> (last visited May 27, 2015).

ODR is infancy stage in India; there is need of proper education and training to general public and workforce; lawyers can be educated to give priority to conciliation/mediation to save time and money while settling disputes.^{197,198}

VI. Concluding remarks

Indian entrepreneurs and foreign MNCs are forging various e-commerce ventures. Being at very nascent stage, less number of e-commerce players are actually knowing and complying with techno-legal requirements. Understanding the fact that proliferation of new technologies like e-commerce require solid legal framework, the Indian government made an attempt to address number of issues and legislated the IT Act as a mixture of too many provisions. As a result, several provisions which are essential for development of e-commerce environment are incomplete or unaddressed. These include issues related to legal validity of e-transactions, security, junk mail and spamming, content regulation, intellectual property, payment, taxation of e-commerce transactions, intermediary liability, jurisdiction and consumer protection. E-commerce industry had a hope of getting an improved version when the IT Act 2000 was amended in 2008. But certain issues still remained unanswered, for example, like any other contracts, e-contracts are governed by basic principles of the Indian Contract Act 1872 and formation of online contracts and legal enforceability of online contracts involving international parties is still cumbersome. Because of inadequate provision of the IT Act 2008, the Reasonable security practices and procedures and sensitive personal data or information rules was introduced in 2011 to provide framework for protection of data and it lists out security practices and standards. India contributes almost 3.43% of unwanted mail, and ranks 6th as source of world's spam, still India lack in legislative measure to control it. The IT Act is silent on the issue of protection of intellectual rights (patents, trademarks, copyrights) including domain names and it is dependent on other acts to protect intellectual property infringements. Both traditional and electronic payment systems in India are regulated by the Payment and Settlement Systems Act 2007. Similarly, High Powered Committee (HPC) constituted by the Central Board of Direct Taxes quoting principle of 'neutrality', maintained that no separate regime for the taxation of e-commerce transactions is required and existing laws are sufficient, but in reality India is struggling with e-commerce taxation issues (direct and indirect taxes). Jurisdiction and enforcement issues relating e-commerce jurisprudence are still nascent in India. There are certain loopholes in the IT Act such as ambiguity with respect to legal jurisdiction of contracts involving international parties and absence of dual-key

¹⁹⁷ *Id.*

¹⁹⁸ Agarwal, *supra* note.

pairs for individuals and business, compromising confidentiality of e-transactions. With regard to consumer protection also, there is no separate law which is specifically regulating online transaction, therefore the IT Act rely on the Consumer Protection Act, (1986).

It can be observed that present form of the IT Act is too weak and it has to depend on other legislations to cope up various legal issues in e-commerce. Only a strong legal framework can create a business environment which is conducive for e-commerce industry in India. Therefore, policy makers should introduce a separate e-commerce law to keep pace with rapid technological developments.