# LAW AND DEVELOPMENT IN THE AGE OF DISRUPTIVE TECHNOLOGIES: A CONCEPTUAL DISCOURSE\*

#### **Abstract**

The advent of disruptive technologies has brought about unprecedented challenges to the legal landscape, necessitating a paradigm shift in legal development. This article undertakes a conceptual discourse analysis to explore the intricate relationship between law and disruptive technologies. It examines how emerging technologies, such as artificial intelligence, and the Internet of Things (IoT), are redefining the contours of legal frameworks and regulatory structures. Through a critical examination of existing literature and case studies, this article identifies the key challenges posed by disruptive technologies to legal development, including the need for adaptive regulation, the blurring boundaries between public and private law, and the emergence of new forms of legal liability. It also explores the opportunities presented by disruptive technologies for legal innovation, such as the use of smart contracts and online dispute resolution platforms. This article argues that the effective regulation of disruptive technologies requires a nuanced understanding of their underlying logics and architectures. It proposes a conceptual framework for analyzing the impact of disruptive technologies on law, which takes into account the complex interplay between technological, social, and legal factors. The article concludes by highlighting the need for a multidisciplinary approach to legal development in the age of disruptive technologies, one that combines insights from law, technology, and social science to create more effective and responsive legal strides.

Keywords: Law, Technology, Disruption, Challenges, Adaptation

#### 1. Introduction

The legal profession is on the cusp of a technological revolution. In an era marked by technological revolutions, the legal profession sits at the cusp of conservatism and traditionalism. The rapid increase in digitization which has transformed every sector of society has brought demands for the morphing of legal services delivery and the practice of the profession as a whole. Besides doing away with the billable hour, in-house teams need to get more back than we have gotten before from the law firms for the same amount of money. In addition to high quality legal services and advice, we need to get insight into the work of the law firms in a way we have never had before. The law firms are full of valuable information and data about the legal services that we procure from them, which could inform in-house teams about the business of the company they work for more broadly. Seriously, disruptive technologies are transforming the way law is practiced, adjudicated, and accessed. Emerging trends have shown the impact of disruptive technologies in the legal profession. The future of the legal world is inherently influenced by technology; automation and innovation which would further shape the way of legal reason wither inductive or deductive to further advance for of a print-based media society of technology-based Internet society.<sup>2</sup> Embracing these innovations can promote legal development, enhance access to justice, and improve the overall efficiency of the legal system.' Heretofore, the practice of law was tantamount to the provision of legal services. The legal profession's unique expertise formed the basis for its selfregulation, wherein attorneys established and enforced standards of professional conduct. Nevertheless, the global financial crisis and technological innovations have substantially impacted the manner in which goods and services are procured and delivered.

Despite its historically isolated and static character, the legal industry in presently compelled to confront and respond to far-reaching disruptive technologies embedded in socio-economic developments, thereby necessitating transformative change and adaptability of certain Artificial Intelligence to achieve legal logic in resolving legal problems. Checking for due diligence and a quick legal rhetoric's review; Artificial Intelligence is said to have improved the overall productivity of Law firms all over the world not limited to Nigeria. In corporate transactions, many Associates and Attorneys spend human hours searching online data rooms to either review company documents, contracts or other vital information in due diligence. However, with the invention of Artificial Intelligence, (AI) this task is almost made easy. Be that at it may, AI is not expected to replace human creativity but it shows a lead. In most part of the world, Law firms or lawyers who embrace artificial intelligence and other advance technologies, legal work has become more efficient and effective. Applying AI in the legal sector literally aims to streamline work processes by simply helping lawyers perform due diligence through conducting adequate research. By definition, 'Any artificial system that performs tasks under varying and unpredictable circumstances without significant human oversight, or that can learn from experience and improve performance when exposed to data sets. This is where the problem lies. This is means that AI has a lot of limitations and for lawyers to employ the use of AI, extreme diligence must be employed at always.

# 2. Disruptive Technologies and the Law

Disruption arises when technological innovations introduce novel, yet contentious, alternatives for human engagement; particularly when such advancements precipitate the creation of novel regulatory frameworks or alternative

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<sup>&</sup>lt;sup>1</sup>L. E. Bassli, 'Shifting Client Expectations of Law Firms: Morphing Law Firms into Managed Services Providers, (2017). 'Management for Professionals' in: K. Jacob, D. Schindler & R. Strathausen (ed.), *Liquid Legal*, pp 59-75, Springer.

<sup>&</sup>lt;sup>2</sup> J. B. Rajendra (2020) Disruptive technologies and the legal profession. *International Journal of Law*. Volume 6; Issue 5; 2020; P No. 271-280

jurisprudential spaces, thereby challenging existing legal paradigms and necessitating adaptive responses from governmental, judicial, and private sector stakeholders. Technologies have indeed shape legal service delivery. The future of the legal market will be may no longer be platform-based but technology driven world. With the client at the centre of legal delivery, pressure of work can be eased out with the machine tools to aid service delivery in modern times of the legal profession.<sup>3</sup> While platform-based legal delivery is encouraged and it enables people and organizations to interact and work within a basic collective framework, legal research for service delivery is equally importance as very conducive to address multiple uses of common challenging cases.' Legal services are emblematic of professional services, yet they have been subjected to scrutiny for their perceived inefficiencies, ineffectiveness,<sup>4</sup> and economic inefficacy within the UK's increasingly competitive legal marketplace.<sup>5</sup> Despite these critiques, the legal sector maintains its status as a vital component of the global economy. Indeed, the United States and the United Kingdom, the legal sectors occupy a preeminent position in the international market, thereby collectively generating significant annual revenues of over \$330 billion and £26 billion, respectively, in 2019.<sup>6</sup> According to Mark A. Cohen,<sup>7</sup> self-regulatory paradigm employed by the legal profession blurs the distinction between the practice of law and the delivery of legal services which is the industry side of the law. This however, exacerbates the access-to-justice crisis that affects tens of millions of individual's legal practitioners, thereby compromising the interests of existing legal consumers, and undermines the broader delivery of societal well-being in service-oriented performance with the aid of technologies aiding legal development.

## 3. Intervention of Disruptive Technology and the Legal Profession

Evolution is marked by a steady transition from primitive to advanced, simple to complex, and inadequate to optimized states, driven by growth and improvement. Evolutionary Road presents a multifaceted exploration of the legal industry's metamorphosis, integrating timeline and analytical insights to provide a rich understanding of its dynamic transformation. In the same vein, disruptive technologies, such as artificial intelligence, blockchain, and cloud computing, are transforming the way law firms presently operate in services delivery and interaction with specific clients. This seismic shift challenges traditional legal practice, and ushering in a new era of efficiency, accessibility, and innovation. Thus, the integration of technology into legal practice has sparked both excitement and trepidation.<sup>8</sup> It is argued on the one hand, technology-enhanced tools streamline tasks, reduce costs, and improve accuracy. Online platforms and portals enhance client experience, while analytics and machine learning facilitate informed decision-making. On the other hand, regulatory uncertainty, cyber security risks, and ethical concerns surrounding AI-driven decision-making pose significant challenges.<sup>9</sup> According to Richard Susskind and Daniel Susskind, <sup>10</sup> In an Internet society, 'we will neither need nor want doctors, teachers, accountants, architects, the clergy, consultants, lawyers, and many others, to work as they did in the 20th century.'

As the legal landscape evolves, law firms must adapt to remain relevant and one of the many ways open to legal practitioners is to key to technology as emerging trend which cannot be waived on the spurs of the moment. The emergence of hybrid legal professionals, blending legal expertise with technical acumen, will redefine the future law profession. This is because, new legal services, such as online dispute resolution, has already arisen, line court proceedings are already taking place and alternative fee structures will replace traditional bills. Transparency, driven by technology, will become a hallmark of legal practice. This transformation raises fundamental questions about the future of law.<sup>11</sup> Will technology augment or replace human legal expertise? How will regulatory frameworks keep pace with technology innovation? What skills will lawyers need to thrive in this new environment of technology domination?

The integration of technology into legal practice has sparked both excitement and trepidation within the legal community. On one hand, technology has the potential to revolutionize the delivery of legal services, enhancing efficiency, accuracy, and accessibility. Advanced tools such as artificial intelligence, block-chain, and cloud computing

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<sup>&</sup>lt;sup>3</sup>L. flex 'The Future of Legal Service Delivery' (2023) <Available on www.lawflex.com/the-future-of-legal-service-delivery>accessed on 5 May 2025.

<sup>&</sup>lt;sup>4</sup>A. V. NordenflychtWhat is a Professional Service Firm? Toward a Theory and Taxonomy of Knowledge-Intensive Firms' (2010). *Academy of Management Review*. Vol. 35 (1) <a href="https://www.researchgate.net/publication/228211125\_What\_is\_a\_Professional\_Service\_Firm\_Toward\_a\_Theory\_and\_Taxonomy\_of\_Knowledge-Intensive\_Firms>accessed on 12 May 2025.

<sup>&</sup>lt;sup>5</sup>P. Falconer New Labour and the Modernisation of Public Services' (2005). Public Police and Administration. Volume 20, Issue 2.<Available on www.journals.sagepub.com/doi/10.1177/095207670502000206>accessed on 3, December 2024. 
<sup>6</sup> UN United Nations Conference on Trade and Development' (2019). https://unctad.org/system/files/official-document/wir2019\_en.pdf. (Retrieved on the 3rd day of October, 2024.

<sup>&</sup>lt;sup>7</sup>M. A. Cohen 'Law Is a Profession and an Industry -- It Should Be Regulated That Way' (2018)<Available on www.forbes.com/sites/markcohen1/2018/03/29/law-is-a-profession-and-an-industry-it-should-be-regulated-that-way/>accessed on 5 May, 2025.

<sup>&</sup>lt;sup>8</sup>R. Susskind, *Tomorrow's Lawyers: An Introduction to your Future* (2023) (3<sup>rd</sup> Edition). According to him in this book, Technology can automate routine tasks, freeing lawyers to focus on higher-value work.

<sup>&</sup>lt;sup>9</sup>R.Susskind & D. Susskind, *The Future of the Professions: How Technology Will Transform the Work of Human Experts* (2015) 1st Edition.

This book predicts the decline of today's professions and describes how they can easily be replaced The Future of the Professions explains how 'increasingly capable systems' -- from telepresence to artificial intelligence -- will bring fundamental change in the way that the 'practical expertise' of specialists is made available in society. The authors challenge the 'grand bargain' -- the arrangement that grants various monopolies to today's professionals.

10 Ibid.

<sup>&</sup>lt;sup>11</sup> Richard Susskind - The Future of Law (1996) and Tomorrow's Lawyers (2013)

can automate routine tasks, facilitate document review, and provide real-time access to case law and statutes. As we navigate this uncharted territory, one thing is clear: disruptive technology will reshape the legal profession, presenting opportunities and challenges in equal measure. Embracing this change, law firms must harness technology to enhance efficiency, accessibility, and justice. This has led to increased productivity, reduced costs, and improved client satisfaction.

However, the integration of technology also raises significant concerns. One of such primary concerns is the potential disruption of traditional legal practice models. The rise of online legal platforms and virtual law firms challenges the conventional brick-and-mortar approach, potentially undermining the livelihoods of traditional lawyers. Furthermore, the increased reliance on technology heightens the risk of cyber security breaches, data theft, and confidentiality compromises. This has led to calls for enhanced regulatory frameworks and stricter data protection protocols. Another concern is the potential impact on access to justice. While technology has the potential to increase access to legal services for underserved populations, it also risks exacerbating existing inequalities. The digital divide between technologically savvy and less tech-literate individuals may perpetuate disparities in access to justice. Moreover, the increasing reliance on AI-driven decision-making raises questions about bias, transparency, and accountability. Despite these concerns, many argue that technology is essential for the future of legal practice. Proponents contend that technology can enhance the quality of legal services, reduce errors, and facilitate more informed decision-making. Moreover, technology can enable lawyers to focus on higher-value tasks, such as strategic advice and complex problem-solving. To mitigate the risks, law firms and regulatory bodies must prioritize investment in cyber security, data protection, and technological training.

Ultimately, the integration of technology into legal practice demands a nuanced approach, balancing innovation with caution. Lawyers, regulators, and technologists must collaborate to develop and implement technologies that enhance legal practice while protecting the integrity of the profession. By embracing this challenge, the legal community can harness technology to improve access to justice, enhance client satisfaction, and fortify the rule of law no matter the high incursion of technology into the domain of legal practice. In furthering this discussion, reports outlined some of the most important ways in which technology has challenged the practice of law in recent times. Some of these challenges are the opportunities technology creates in the legal profession; the importance of big data and analytics in constructing legal cases, the effect of technologies on the business of law as model and the potential legal disrupters. Furthermore, Artificial Intelligence (AI)-powered tools can analyze vast amounts of date, identify patterns, and provide predictive insights, enabling lawyers to make informed decisions; Block chain technology mostly secure, decentralized, and transparent and has the ability to facilitate smart contracts with minimal time. Digital evidence management and intellectual property protection. Also, the virtual driven and augmented reality tagged as (VR/AR) is an immersive technology which can enhance courtroom presentations, facilitate remote testimony, and improve the lawyers understanding.<sup>12</sup> This is currently being practiced by the National Industrial court of Nigeria and some other High Courts in Lagos by application being made by lawyers. The Cloud computing is scalable, 13 secure and collaborative in nature which further enhance a cloud -based platforms which can streamline legal research, document management and client communication. There is the technology for natural language processing which can automate document review contracts analysis, and legal research.

#### 4. Literature Review

Richard Susskind's article titled, 'Tomorrow's Lawyer, said so much on disruptive technologies which are transforming the legal industry, changing how law firms operate, and altering the delivery of legal services. The book predicts a significant shift in the way professionals work due to technological advancements, challenging traditional professions' dominance. <sup>14</sup> The author sheds light on how technology will disrupt traditional professions, and making some tasks obsolete. He proposes five major models for the furtherance of professional work of face-to-face services. They are the traditional model, the Bespoke Model (customized, technology-enable services driven), the Streamlined Model (which brings about efficiency and standard), the discomposed model (which breaks down tasks into smaller components) and finally, the platform model based on online platforms connecting all professionals and client on one on a go. The book also explores impact on Professions: The book explores the potential impact on various professions, including law, medicine, education, accounting and consulting. The book identifies with information technology, globalization, changing client expectations, economic pressures. It suggested new that professional will need new skills to develop in the world of disruptive technology by way of technology literacy, Data analysis, communication, and collaboration through net-working. In conclusion, the author argued that professionals must adapt to these changes, by undertaking on high-value tasks that require human skills and give technology the chance to handles major routine tasks.

Another author who has showed his skill on the topic of disruptive technology is Richard Susskind, <sup>15</sup> who explores and examined the transformation of law profession through, In year 2000, he also wrote on transforming the law where he further examine the impart of technology on the law firms and various legal practice, he has had several interview in year 2005 and legal experts in changing times which was published was a collection of interviews with legal professionals on the future of

<sup>&</sup>lt;sup>12</sup>R. Susskind 'The Future of Law: Challenges and Opportunities' (2015) *Journal of Law and Society* - Vol. 42, Issue 1, pp. 13-34, P

<sup>&</sup>lt;sup>13</sup> 1.Richard Susskind, *Tomorrow's Lawyers: An Introduction to Your Future* (2013) P 43:

R. Sussking D. Susskind 'The Future of the Professions: How Technology Will Transform the Work of Human Experts' (2015)<Available onhttps://www.danielsusskind.com/the-future-of-the-professions>accessed on 12 May 2025.

<sup>&</sup>lt;sup>15</sup>R. Susskind, The Future of Law Facing the Challenges of Information Technology (2015) Oxford University Press, p. 2.

law. Also, in year 2008, he published a book 'End of Lawyers' where he argued that technology will significantly change legal practice. In his 'Tomorrow's lawyers,' his prediction was the changes in law firms, courts and the legal education as a result of disruption in technology. During this research, he articles and books were useful contributions. The work of Richard Moorhead<sup>16</sup> on disruptive technology is also notable. He has written a book titled 'Law's Future(s) in 2019 which was coedited with Steven Vaughan; also, there another book titled 'The Careful Judge' written in 2016, co-authored with Gee and Sherr, there is the book on 'Lawyers' Ethics and Professional Responsibility written in year 2010. Most of these books centre on future of legal profession and impact of technology, ethics and professionalism in law, access to justice and judicial decision-making and accountability in the wake of disruptive technology. The End of Lawyers argues that technology will significantly change legal practice in the modern world while that idea was further in 'tomorrow's law which predicts huge changes in the way law firms will practice including courts and legal education.

Another report consulted is the Deloitte<sup>17</sup> It was argued in the 'The adoption of disruptive technology is a growing trend, requiring performance indicators to measure its impact on the legal profession and inform ongoing monitoring, evaluation, and strategic adjustment. Several other reports were consulted such as Ernst and Young's *Global Talent Survey* (2019); and Gallup's State of the American Workplace Report (2017). These reports and other papers were consulted and proved useful during this research. Articles and presentations were also research upon during the course of this research. One such article is Forbes (2020), Disruptive Technologies and the Legal Industry which indeed has a forward-thinking and cautionary tone. It highlights the transformative impact of technology on the legal profession and further place emphasis on the need for law firms to adapt and be innovating in order to remain relevant in a rapidly changing world of technology. What I gathered from this study is that rise of Automation of routine tasks, which may lead to job displacement for some legal professional. It also discloses that big data and analytics in the area of increasing importance of date analysis in legal decision-making leading to cloud computing which is beneficial solution for law firms, including increased efficiency and flexibility. Finally, the articles encourage law firms to embrace disruptive technologies and investment in innovation, development of new skills to stay at the competitive edge. This is article is insightful and advisory as it urges the legal professionals to prepare for a future where technology plays a dominant.

### 5. Disruptive Technology and Legal Development

The real challenge for today-lawyers lies in the way the set of relevant data about the world has expanded exponentially. <sup>18</sup> Disruptive technologies have revolutionized access to justice, bridging the gap between underserved populations and vital legal services. Online platforms, mobile applications, and artificial intelligence-powered tools have democratized access to legal information, advice, and representation. For instance, virtual courts and online dispute resolution platforms enable individuals to resolve disputes remotely, reducing costs and increasing efficiency. Similarly, legal tech startups offer affordable, automated document preparation and review services, empowering individuals to navigate complex legal processes without incurring exorbitant fees. <sup>19</sup> According to Katelyn, <sup>20</sup> 'today's legal technologies offer innovative ways to facilitate pro bono work. <sup>7</sup> The access-to-justice gap is manifest in the difference between the legal needs of low- and medium-income Americans and the availability of legal resources meeting those needs.' Mobile technology has also played a pivotal role in expanding access to justice. Mobile apps, such as Legal Aid Bureau's 'Law Guide' and the American Bar Association's 'Lawyer Referral,' connect individuals with licensed attorneys and provide critical legal information. Additionally, SMS-based services, like South Africa's 'Legal Aid SMS' platform, offer free legal advice and assistance to marginalized communities. These innovations have significantly improved access to justice for low-income individuals, minorities, and those living in remote or underserved areas.

The integration of artificial intelligence (AI) and machine learning has further enhanced access to justice. <sup>21</sup> AI-powered chatbots, like the 'DoNotPay' <sup>22</sup> platform, provide free legal assistance and guidance on various issues, including consumer protection, employment law, and immigration. <sup>23</sup> Moreover, AI-driven document analysis and review tools enable lawyers to focus on high-value tasks, reducing costs and increasing pro bono capacity. <sup>24</sup> These technological advancements have transformed the legal landscape, ensuring that justice is more accessible, affordable, and inclusive for all. These are innovations and development which technology brought to legal development. Technology disruption may be defined as a new breakthrough that is very influential in changing the existing system, the way consumers, industries, or markets operate from conventional to more modern or renewable utilizing digital technology. The integration of Artificial Intelligence (AI) in the legal sector has revolutionized the efficiency and productivity of legal services. AI-powered tools automate routine tasks, such as document review, contract analysis, and data processing, freeing lawyers to focus on high-value tasks that require expertise

<sup>&</sup>lt;sup>16</sup>R. Moorhead 'Lawyers' Ethics and Professional Regulation' (4th Ed.) p. 21. <Available on www.scribd.com/document/770682126/Lawyers-Ethics-and-Professional-Regulation-4th-Edition>accessed on 12 May 2025.

<sup>&</sup>lt;sup>17</sup>Deloitte 'Enabling the legal function to embrace digital transformation: Legal Technology Transformation: Going beyond risk and compliance' (2018)<Available www.deloitte.com/ng/en/services/legal/perspectives/legal-technology-transformation.html>accessed on 12 May 2025.

<sup>&</sup>lt;sup>18</sup>J. Furlong, Evolutionary Road: A Strategic Guide to the Future of Law, 2016). p 117.

<sup>&</sup>lt;sup>19</sup> R. Smith. The Future of Law: Technology, Innovation and Access to Justice in Legal Services Around the World. p. 84<Available on

https://www.researchgate.net/publication/359764852\_5\_The\_Future\_of\_Law\_Technology\_Innovation\_and\_Access\_to\_Justice\_in\_Legal\_Services\_Around\_the\_World>accessed on 12 May 2025.

<sup>&</sup>lt;sup>20</sup> K. N. Ringrose 'Law and Technology' (2020) Online Legal Services that Help Bridge the Access to Justice Gap.

<sup>&</sup>lt;sup>21</sup> R. Susskind, Access to Justice and the Role of Technology (2017) p 123

<sup>&</sup>lt;sup>22</sup> M. Lauritsen, Legal Tech and Access to Justice' (2018) Harvard Journal of Law and Technology, 31(2), 357-384.

<sup>&</sup>lt;sup>23</sup> M. Lauritsen (2018) Legal Tech and Access to Justice, 78

<sup>&</sup>lt;sup>24</sup>AB 'Access to Justice: Technology's Role' (2020), Legal Services Corporation (2019) Disrupting Justice: How Technology is Revolutionizing Access to Justice and UNDP (2018) Technical Report on 'Technology and Access to Justice.

and strategic thinking.<sup>25</sup> By leveraging machine learning algorithms and natural language processing, AI systems can analyze vast amounts of data, identify patterns, and provide insights that would be impossible for humans to detect. This enables lawyers to work more efficiently, reduce errors, and deliver high-quality services to clients.

Artificial intelligence-driven solutions substantially augment legal productivity in research, drafting, and case management. Sophisticated search algorithms and knowledge management systems facilitate expedited location of pertinent judicial precedents, statutory provisions, and regulatory guidelines, thereby streamlining the research process. Moreover, AI-powered document automation tools generate initial drafts, expedite collaborative editing, and ensure conformity with applicable regulatory requirements. Furthermore, AI-driven case management systems optimize workflow efficiency, predict litigation outcomes, and provide real-time analytical data, enabling attorneys to render informed, data-driven decisions. By complementing human capabilities, AI unlocks enhanced productivity levels; thereby empowering lawyers to manage increasingly complex cases, expand client services, and foster business development.

The integration of Artificial Intelligence (AI) has yielded substantial efficiency and productivity advancements, profoundly impacting the legal landscape and conferring benefits upon law firms, corporate legal departments, and individual practitioners. Notably, a McKinsey report reveals that AI can automate approximately 23% of law firm tasks, thereby generating considerable cost savings and enhancing profitability. Furthermore, a survey conducted by the American Bar Association discloses that 71% of attorneys reported enhanced productivity and efficiency subsequent to adopting AI-powered tools. As AI technology continues to advance, it's potential to augment legal development and productivity will correspondingly expand, empowering lawyers to provide heightened value to clients, drive innovation, and shape the future trajectory of the legal profession.

# 6. Technology Changing Legal Profession

Technology disruption may be defined as a new breakthrough that is very influential in changing the existing system, the way consumers, industries, or markets operate from conventional to more modern or renewable utilizing digital technology. The integration of Artificial Intelligence (AI) in the legal sector has revolutionized the efficiency and productivity of legal services. AI-powered tools automate routine tasks, such as document review, contract analysis, and data processing, freeing lawyers to focus on high-value tasks that require expertise and strategic thinking. <sup>26</sup> By leveraging machine learning algorithms and natural language processing, AI systems can analyze vast amounts of data, identify patterns, and provide insights that would be impossible for humans to detect. This enables lawyers to work more efficiently, reduce errors, and deliver high-quality services to clients.

Technology disruption, fueled by digital innovation, revolutionizes industries and markets, replacing conventional systems with modern, efficient, and renewable solutions. In the legal sector, Artificial Intelligence (AI) integration has transformed efficiency and productivity. AI-powered tools automate routine tasks, such as document review, contract analysis, and data processing, freeing lawyers to focus on high-value tasks requiring expertise and strategic thinking. Leveraging machine learning algorithms and natural language processing, AI systems analyze vast data amounts, identify patterns, and provide insights undetectable by humans. Artificial Intelligence driven solutions substantially augment legal productivity in such areas as legal research, drafting, and case management. Furthermore, sophisticated search algorithms and knowledge management systems expedite location of pertinent judicial precedents, statutory provisions, and regulatory guidelines by streamlining research. AI-powered document automation tools generate initial drafts, facilitate collaborative editing, and ensure regulatory conformity but it for the lawyer or the researcher to decided and decipher which area is relevant in the course of the research. Moreover, AI-driven case management systems optimize workflow efficiency, shorten distance and predict litigation outcomes in some cases. It also provides real-time analytical data that enables informed data-driven decisions which has to be made. By complementing human capabilities, AI unlocks enhanced productivity, empowering lawyers to manage complex cases, expand client services, and foster business development. It has been argued stressfully; the more that we move away from offline environments, the more technologies bear the weight of governance; and, concomitantly, the greater the range and intensity of questions about the authority of law governance and why we should respect it.<sup>27</sup>

i) The integration of electronic mercenaries in terms of Artificial Intelligence has yielded substantial efficiency and productivity advancements in legal issues, profoundly impacting the legal landscape and benefiting law firms, corporate legal departments, and individual practitioners. Notably, a McKinsey report reveals that AI can automate approximately 23% of law firm tasks, generating considerable cost savings and enhancing profitability. Furthermore, an American Bar Association survey discloses that 71% of attorneys reported enhanced productivity and efficiency after adopting AI-powered tools. As AI advances, it's potential to augment legal development and productivity will expand, empowering lawyers to provide heightened value to clients, drive innovation, and shape the legal profession's future trajectory. The dimension of changes may include the following. First is that the utilization of advanced communication and collaboration tools enables legal practitioners to enhance productivity and facilitate seamless communication with clients, irrespective of geographical location or time constraints. Unified Communication and Collaboration (UCC) solutions permit lawyers and clients to interact through various mediums, including: The preparation of cases can be an onerous and labor-intensive process, necessitating considerable time and effort from legal practitioners to meticulously sift through voluminous documents to identify pertinent evidence. In the contemporary digital landscape, a significant proportion of these documents are electronically stored, with potential evidence emanating from diverse digital sources, including; Electronic mail (email), Mobile devices, Database archives, Electronic voting systems, Digital repositories, Social media platforms, Cloud storage. Digital case management facilitates seamless

<sup>&</sup>lt;sup>25</sup> IBA 'The Future Is Now: Artificial Intelligence and the Legal Profession' (2024) <Available on www.C:/Users/HP/Downloads/The%20Future %20is%20Now%20Artificial%20Intelligence%20and%20the%20Legal%20Profession.pdf>accessedon 14 Mary, 2025.

<sup>&</sup>lt;sup>26</sup>Ibit, note 25.

<sup>&</sup>lt;sup>27</sup>R. Brownsword, Law, authority, and respect: three waves of technological disruption (2021), *Law, Innovation and Technology*. Vol. 14, 2022, Issue 1.

sharing of case files among legal professionals, enabling efficient collaboration and expedited exchange of documents within the firm. This digital platform allows for Secure and controlled access to sensitive case information; instant sharing of documents with colleagues within and external parties; Real-time updates and version control and Centralized organization and storage of case files. 28 Furthermore, it bring about analytics leverage as cognitive analytics help automate time-consuming and routine legal processes. Textual threads quite often are examined by natural processing language to understand the component of certain statements in legal documents. In today's legal world, electronic communication has made service of process easier in form of notifications and substituted service. Many lawyer Online Communities can help disadvantage and underserved communities gain access to pro bono legal service, resources and counseling. Social media is becoming more popular as forum for lawyers to network and collaborate. LinkedIn for instance is globally gaining ground and is s legal choice for lawyers because of its focus on professional growth and networking.

#### 7. Harnessing Technology Disruption in Legal Business

According to Clayton, 'disruptive technology is an innovation that significantly alters established industries and markets, creating new sectors and business models.'29 In deed such Innovation has radically changed the way the market, creating new sectors and business models. Such innovation has radically changed the way the market is presently structured thus, reflecting how product and services including legal service are affected and consumed. Some of the advantages of disruptive technology are innovative business models eclipsed with technology-enable legal services. The creation of these new business opportunities has increased competition and innovations in legal practice viz-a-viz client's management. More so, it has brought about further legal education and training which will aid disruptive dominance of technology. Following the disruptive innovation created by technology, identifying certain opportunities is very key for legal practitioners and marketers because one need to savor significant impact;<sup>30</sup> which would improve internal process and structure in enlarging new services by further optimizing legal –oriented services.<sup>31</sup> Furthermore, the explosion of the intervention disruptive technology has solve a lot of perennial problems of physical contact meeting and yet it allow and up-to-date on various emerging technology trends.<sup>32</sup> To take advantages of this, researching and exploiting new technologies, participating in conferences in discussion groups and presenting virtual seminal paper presentations.<sup>33</sup> On the other side, it is left for practitioners to leverage and on specific objective which one would like to achieve with disruptive technology and its usages can help assist the objectives which actually aligned with the objective one's overall strategic goal.<sup>34</sup> Furthering this discussion, an action plan is necessary and this include the specific interest in the area of technology with the require resources and the attendant responsibilities. 35 The compactness of disruptive technology is a growing trend and yet, it involves when put to use, a performance indicators whether it has aided the development of legal profession or not leading to consistency of monitoring, evaluation and employment of strategy.<sup>36</sup> To effectively harness disruptive technology, practitioners should define clear objectives aligned with their organization's strategic goals, enabling targeted deployment with measurable outcomes.<sup>37</sup>

#### 8. Challenges and Opportunities

Legal challenges abound with digital disruption. Digital disruption simply refers to the impact new digital technologies have on a business's services, wither legal or otherwise with respect to clients and workforce. In other word, digital disruption is presently relevant as it is more prevalent within all industries, due to the mobilisation of technology and the introduction of new technologies for the provision of service-oriented business. However, there are bottlenecks in the wake of digital disruptions in today's world which includes but not limited to the following:

Regulatory Frameworks: At the time of this study, there are not clear guidelines and regulations framework to ensure responsible adoption of disruptive technologies in the legal atmosphere.

Cyber security is another area to be taken up: There is need to protect sensitive client data and ensuring the integrity of legal transactions in this world of hackers and cybercrime.

Digital Divide: There is presently a huge gap between technologically savvy and less tech-literate legal professionals, the question of the roadmap to bridge this gap is still begging for answer.

<sup>&</sup>lt;sup>28</sup> Deloitte. 'Legal Tech: Transforming the Legal Profession '(2020) <Available on www2.deloitte.com/dl/en/ps/legal/articles/legaltech-legal-department.html>accessed on 14 May 2024.

<sup>&</sup>lt;sup>29</sup>C. Christensen 'Disruptive Innovation' (1995) Harvard Business Review<Available on www.repsol.com/en/energy-and-thefuture/technology-and-innovation/disruptive-technologies/index.cshtml>accessedon 11 May 2025.

<sup>&</sup>lt;sup>30</sup> S. J Silber 'Opportunity Identification in the Legal Profession' (2020), Journal of Law, Business and Ethics, p 45.

<sup>&</sup>lt;sup>31</sup>Respsol Global: Breakthrough that Change our lives. https://www.repsol.com/en/energy-and-the-future/technology-andinnovation/disruptive-technologies/index.cshtml.

<sup>&</sup>lt;sup>32</sup> IBA The Future Is Now: Artificial Intelligence and the Legal Profession (2024)<Available on www.ibanet.org/document?id=AI-R. Russkind 'Online Courts and the Future of Justice' (2020) journal-report>accessed on 3, May, 3035. <vailable<www.global.oup.com/academic/product/online-courts-and-the-future-of-justice-</p> 9780192849304?cc=us&lang=en&>accessed on 11 April, 2025.

<sup>&</sup>lt;sup>33</sup> Katz, Daniel Martin. 'The Future of Legal Education: How Technology is transforming the Law.' Journal of Legal Education, vol. 68, no. 3, 2019, pp. 555-570.

<sup>&</sup>lt;sup>34</sup> Christensen, C. (1997). The innovator's dilemma: When new technologies cause great firms to fail. Harvard Business School Press; Deloitte. (2020). Digital Transformation in the Legal Sector, p 15; where it was argued that 'To effectively harness disruptive technology, practitioners should define clear objectives aligned with their organization's strategic goals, enabling targeted deployment and measurable outcomes.'

<sup>35</sup>J. P. Kotter Leading Change While Transformation Efforts Fail (1996) Harvard Business School Press, p 6>available on https://irpcdn.multiscreensite.com/6e5efd05/files/uploaded/Leading%20Change.pdf>accessed on 4, May 2025.

<sup>36</sup>ABA Lawyers and Cloud Computing in 2020<Available onhttps://www.mycase.com/blog/general/aba-survey-results-lawyers-and-cloud-computing-in-2020-2/>accessedon 2, may 2025.

<sup>&</sup>lt;sup>37</sup> Ibid.

Collaboration and Integration: It is not easy quite often for the big wigs in the legal world to embrace encourage interdisciplinary collaboration between up-coming lawyers, technologists, and innovators in furthering the innovations brought about by disruptive technology.

Disruption of technologies has long been integrated into legal practice with attendant advantages. Sometime in Smart contracts, block-chain platforms could be use by, law firms to cut down the manual work out of signing contracts without compromising on security. This gives lawyer the advantages to also create and validate legal contracts without the need for paper or human intervention. Furthermore, many intellectual property filings undergo so much time-consuming manual approval process. Through the use of block-chain, they usually cut out the middle man by just allowing content creators to upload their intellectual property onto a network for repeated reference in future.

Cloud computing: Although, the legal profession is not new to cloud computing but is admitted that now most law firms can trust cloud computing. Many law firms use cloud-based apps, such as the Microsoft 365 suite, for productivity and out-of-office work. It is should be however noted that when it comes to law-specific tasks, only half of firms use cloud solutions. One of the many ways open to legal firms is to tap into cloud computing to streamline services, boost employee's productivity, and provide a more competitive service. There are several ways in which technology can boost law practice. 38

Remote working initiatives: Cloud environments and relevant applications allow for a distributed workforce. There are many benefits to a remote workforce. It has been argued that twenty four percent of employers say it reduces staff churn.<sup>39</sup> Presently, there are many legal cloud services brought about by disruptive technologies which officers services that could revolutionise a law firm. Citing one example is the online case management software which allows one to run your business securely from any part or the world.<sup>40</sup> According to IDG, on scalability,<sup>41</sup> it is given that servers are very hard to scale because one need to by new racks and space to house one's date. The advantage is a law firm is empowering to move to cloud by scaling with simplicity.

Lastly, when big data and analytics re concerned, the legal industry is still lagging behind. <sup>42</sup> On the other hand this is regardless of whatever reason which may involve, it is important to comprehend that most data can unlock huge value for the company, therefore, when they are analysed, they can proved a treasure in the belly of innovative and actionable business insights; such as case study analysis, marketability, negotiation and case management.

#### 9. Conclusion and Recommendations

The disruptive technology has revolutionlised legal practice by way of service delivery. Even as the advantages are much more than the disadvantages, there is more to do in area of cyber security and scalability of servers. Realising that disruptive technology has taken the centre stage, its potentials to revolutionise the legal profession is by promoting legal development, access to justice and efficiency. Legal practitioners are therefore left with the choice of the willingness to adopt, adapt and collaborate to invest in the will of progress of law through disruptive technologies. Disruptive technology represents a paradigm which defines the underlying assumptions, <sup>43</sup> principles, and values of a particular discipline, theory, or practice. <sup>44</sup> It quite often represents a distinct way we reason by way of thinking, perceiving things and or understating the reality of time. <sup>45</sup> In order not to be left behind in the cold, it is better to take advantage of spurs of the moment of disruptive technology. There is therefore need to invest in legal technology research to bring about legal development. Establishment of clear regulatory frameworks for Disruptive Technology is necessary. There is need for the provision of adequate training and education for legal professionals. The Learned Silk in the legal profession should encourage interdisciplinary collaboration within the Legal Profession. More than before, there is need to foster the culture of innovation and experimentation to promote legal development through disruptive technology.

<sup>&</sup>lt;sup>38</sup>C. Kevin & O. Olayinka. Big Data Analytics in Identifying Legal Service Needs Across Demographics (2025)<Available onwww.researchgate.net/publication/388318329\_Big\_Data\_Analytics\_in\_Identifying\_Legal\_Service\_Needs\_Across\_Demographic s>accessed on 20, April 2025.

<sup>&</sup>lt;sup>39</sup>P. Jason & H. Castro 'Scalability Changes in Clud Computing (2021)<Available www.researchgate.net/publication/387958066\_Scalability\_Challenges\_in\_Cloud\_Computing>accessed on May 6, 2025. Ernst & Young. Global Talent Survey (2019)<Available www.inclusievearbeidsorganisatie.org/sites/default/files/kb-uploads/gl-2019-global-talent-trends-study\_mercer.pdf>accessed on 8 May 2025.

<sup>&</sup>lt;sup>40</sup> L.F. Luff 'What Are the Benefits of a Legal Case Management System?' < Available https://www.practicepanther.com/blog/whatare-the-benefits-of-a-legal-case-management-system/>accessed on 6 May 2025. See also H.M. Ibrahim et al 'Understanding the technology and humans as determinants of cloud computing adoption for digital preservation of research outputs in university libraries' (2024) Education and Information Technologies, Volume 30, Issue 5.

<sup>&</sup>lt;sup>41</sup>C. Fa-Chang & L. Wen-Hsing 'Impact of Cloud Computing Technology on Legal Infrastructure within Internet—Focusing on the Protection of Information Privacy' (2012). The Procedia Engineering. 29. 241–251. 10.1016/j.proeng.2011.12.701.<a href="https://www.researchgate.net/publication/257723876">https://www.researchgate.net/publication/257723876</a> The Impact of Cloud Computing Technology on Legal Infrastructure within Internet-Focusing on the Protection of Information Privacy/citation/download <a href="https://www.researchgate.net/publication/download">accessed on May 6, 2025</a>.

<sup>&</sup>lt;sup>42</sup> Forbes, 'Legal Industry's Big Data Problem, Legaltech News' (2019)<Available on https://www.mlaw.gov.sg/files/news/press-releases/2020/10/Minlaw\_Tech\_and\_innovation\_Roadmap\_Report.pdf>accessed on 14 May 2025. U. Pagallo 'The Legal Challenges of Big Data: European Data Protection Law Review 3(1):36-46

<sup>&</sup>lt;sup>43</sup> C. M., Clayton, The Innovator's Dilemma: When New Technologies Cause Great Firms to Fail. (1997) Harvard Business School Press.

<sup>&</sup>lt;sup>44</sup>Havard Business Review; Disruptive Innovation. (2015) <Available www.hbr.org/2015/12/what-is-disruptive-innovation?ref=null>accessed on May 7, 2025.

<sup>&</sup>lt;sup>45</sup>McKinsey, 'Disruptive Technologies: Advances That Will Transform Life, Business, and the Global Economy (2018). <Available at https://www.amazon.com/Disruptive-technologies-Advances-transform-business/dp/0989545717>accessed on 12 May 2015