



REGULATION DISRUPTION

Policy, Law,
and Start-up
Growth Challenges
in India



Editor
Md. Safiullah

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Challenges in India

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Editor

Dr. Md. Safiullah

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Foreword

It gives me immense pleasure to write the foreword for *Regulation Disruption: Policy, Law, and Start-up Growth Challenges in India*, an important contribution to the discourse on the intersection of law, policy, and innovation. As the Vice Chancellor of Chanakya National Law University, Patna, I take pride in the university's continued commitment to advancing scholarship that is not only academically rigorous but also socially and economically relevant.

In recent years, India has emerged as a vibrant hub of entrepreneurial activity, home to one of the fastest-growing start-up ecosystems in the world. However, with rapid innovation comes the inevitable challenge of regulation—how to govern without stifling creativity, how to protect without impeding progress. This edited volume engages with precisely these dilemmas, offering critical insights into the regulatory and policy frameworks that govern the start-up landscape in India.

This book, a product of the Start-up Law & Policy Summit 2024 hosted by CNLU, reflects the university's vision to foster interdisciplinary dialogue and knowledge-sharing between academia, industry, and policy circles. The diversity of contributions—from established scholars to emerging voices—reflects the collaborative and inclusive spirit that underpins legal research at CNLU.

What makes this volume particularly compelling is its ability to contextualize contemporary issues while also looking ahead to the future of regulatory governance in the entrepreneurial domain. Whether it is fintech, data protection, digital commerce, or platform-based services, the authors collectively highlight not just the gaps but also the opportunities that informed policymaking can offer to catalyze start-up growth.

I commend the editorial team and contributors for their commitment to academic excellence, as evidenced by the rigorous peer-review process and the quality of research presented herein. I am confident that this book will serve as an essential resource for policymakers, legal practitioners, scholars, entrepreneurs, and students alike.

I extend my congratulations to all those involved in this important initiative and hope that this volume inspires further dialogue, research, and policy reform in support of India's journey as a global innovation leader.

Prof. (Dr.) Faizan Mustafa
Vice-Chancellor, CNLU Patna

Acknowledgments

The preparation of this edited book was like a journey that I had undertaken for several months. First and foremost, I wish to express my heartfelt gratitude to Prof (Dr.) Faizan Mustafa, Vice-Chancellor, Chanakya National Law University, for his continuous support, guidance, and encouragement in fostering an environment of academic excellence and innovation. His leadership has been instrumental in shaping the vision of this initiative and ensuring the success of this publication.

I would also like to extend my sincere gratitude to Prof (Dr.) S. P Singh, Registrar, Chanakya National Law University, for his invaluable support and assistance in facilitating the publication of this work. His prompt and efficient handling of the necessary procedures ensured a smooth and timely publication process. I am deeply appreciative of his professionalism and dedication, which have significantly contributed to the realization of this book.

I express my gratitude to all the chapter contributors, who allowed us to quote their remarks and work in this book. In particular, I would like to acknowledge the hard work of the authors and their cooperation during the revisions of their chapters.

I would also like to acknowledge the valuable comments of the reviewers, which have enabled us to select these chapters out of the so many chapters we received and also improve the quality of the chapters. Their expertise and commitment ensured that this work upholds both intellectual rigor and practical relevance.

I would also like to thank Dr. Kirti for her strategic insights and inputs, a especial thanks to our *Student Convenor CIILE*, Ms. Manvee in successfully initiating, strategizing and executing the national level event on startup laws, the first ever startup summit of India and gratitude to our *Secretary*, Vincy Chanchal; *Student Co-Convenor CIILE* Arya Gupta; *Student Editor-in-Chief – Blog-CIILE*, Ms. Shiwangi Raj & *Deputy Editor-in-Chief – Blog-CIILE*, Mr. Adil Ameen for managing the event and process of publications successfully.

I Would also take this opportunity to acknowledge the dedication and efforts of our Student *Editorial Team*, whose relentless commitment has been instrumental in curating, editing, and refining this publication. Their hard work and perseverance have played a crucial role in ensuring the quality and impact of this publication.

I hope that this publication serves as a valuable resource for scholars, practitioners, and aspiring entrepreneurs, inspiring further discourse and development in the realm of startup laws and legal entrepreneurship.

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Editorial Note

The Indian startup ecosystem stands as a testament to innovation and entrepreneurial spirit, emerging as one of the largest globally. However, this vibrant landscape is often overshadowed by a complex and evolving regulatory environment that presents significant challenges to startups. While the government's initiatives aim to foster growth, the intricate web of policies and frequent changes can impede the agility essential for startups.

This edited book delves into the intricate interplay between regulation and disruption, examining how policy and law influence the trajectory of startup growth in India. Through a comprehensive analysis, this edited book explores the regulatory hurdles that startups face, including outdated laws, overlapping jurisdictions, the burden of compliance and challenges in new startup law.

This book contextualizes the historical evolution of start-up laws, evaluates their contemporary significance, and anticipates future trends. The curated chapters have undergone a rigorous three-tier review process, ensuring scholarly rigor, authenticity, and relevance. This meticulous editorial process reinforces the book's value as a comprehensive resource for academics, policymakers, legal professionals, and entrepreneurs navigating the complexities of the regulatory environment.

Further enriching the discourse, a panel discussion was held as part of **CATALYST: Start-up Law and Policy Summit 2024**, an event that convened leading industry experts to engage in thought-provoking discussions on emerging legal and policy issues affecting start-ups. Their insights and deliberations have contributed to shaping the thematic focus of this edited book, bridging the gap between theoretical analysis and real-world applications.

By presenting a nuanced examination of start-up law and policy, this edited book seeks to stimulate meaningful debate and encourage further research in the field. It is hoped that the insights contained within these pages will inform policy decisions, support legal advancements, and empower

stakeholders in the start-up ecosystem to navigate regulatory challenges with greater clarity and confidence.

A brief note on the articles is given below.

CHAPTER -1 This article highlighted the imperatives of Artificial Intelligence (AI) in transforming healthcare, from diagnostics to treatment planning. However, the integration of AI and digital health technologies presents significant ethical and legal challenges. Key issues include data privacy, informed consent, regulatory uncertainty, and equitable access to healthcare services. Existing regulations, such as the Telemedicine Practice Guidelines and the Drugs and Cosmetics Act, have not fully addressed the complexities of digital health. Proposed frameworks like the Digital Personal Data Protection (DPDP) Bill aim to enhance data protection but have faced criticism for potential overreach and insufficient safeguards. This paper examines the current regulatory landscape, identifies emerging challenges, and advocates for a comprehensive, rights-based approach to digital health regulation in India.

CHAPTER-2 This article explores the legal and ethical implications of dark patterns in online gaming. It delves into their categorization, impact on user consent, and methods for mitigation through transparent game design and ethical UX practices. The paper critically analyzes regulatory frameworks in the European Union and India, including the Digital Services Act, GDPR, AI Act, India's Dark Pattern Guidelines 2023, DPDP Act 2023, and IT Rules 2021. Emphasizing the fine line between engaging gameplay and manipulation, the article advocates for responsible game design that respects user autonomy, promotes informed decision-making, and ensures long-term player trust. It concludes by calling for industry-wide ethical standards and stronger compliance measures to counteract the growing risks associated with dark pattern deployment in online games.

CHAPTER-3 deals with the intersection of data privacy concerns and the rise of Artificial Intelligence (A.I.) in India's tech start-up ecosystem. It examines the implications of data collection and processing for businesses, particularly in light of the Digital Personal Data Protection Act (DPDPA) and its potential to hinder legitimate entrepreneurial activities. The paper contextualizes key issues such as authorship for AI-generated work, data commodification, and monopolization, with a focus on balancing consumer privacy with commercial freedom. It proposes potential amendments to the DPDPA, including sub-categorizing sensitive personal data and offering differential treatment. The chapter further analyzes a risk-based vs. use-case approach to regulation and recommends safeguards for A.I. applications,

drawing from case studies and existing regulations. Ultimately, it aims to provide a comprehensive framework that facilitates innovation while safeguarding privacy.

CHAPTER-4 examines the evolving regulatory landscape for startups in India, focusing on key reforms such as the abolition of angel tax and the introduction of measures to simplify business operations, capital acquisition, and compliance burdens. It explores the eligibility criteria for registering as a startup, including turnover limits, innovation focus, and certification requirements. The paper also highlights the challenges startups face, particularly in their early stages, including funding difficulties and a lack of guidance compared to other industries like exam preparation. It discusses the need for a comprehensive startup policy and proposes a structured framework for startups at different stages—nascent, novice, and unicorn—emphasizing legal guidance, compliance, and growth. The chapter aims to contribute to India's aspiration of becoming the global leader in unicorns, fostering an inclusive growth environment that supports entrepreneurship and innovation in the country.

CHAPTER 5 deals with the role of domestic funding in India's startup ecosystem, examining the legal reforms and regulations necessary to reduce reliance on foreign investments. Despite India being one of the largest startup hubs, over 85% of its funding comes from overseas, a dependency that has been exposed due to a decline in foreign investments. The paper highlights the legislative shortcomings and suggests amendments to better mobilize domestic funds, including pension funds, insurance funds, and high-net-worth individuals. It emphasizes the need for regulatory reforms to encourage local investments, ensuring a stable and self-sufficient startup ecosystem. The study also explores the challenges in balancing risk and investor protection while fostering a conducive environment for domestic investors. By addressing these issues, the chapter aims to provide a roadmap for policies that can create a more resilient and independent startup landscape in India, reducing the reliance on external capital.

CHAPTER 6 deals with the intersection of innovation and regulation in India's startup ecosystem, with a specific focus on blockchain technology. It explores how current regulations impact the adoption and growth of blockchain in startups, while also examining international regulatory frameworks to highlight the challenges and benefits of using blockchain in business operations. The paper proposes a balanced policy framework that aligns innovation with essential regulatory measures like consumer protection and financial stability, fostering a positive environment for startup

growth and expansion. It identifies key areas where policy interventions could strengthen India's position in the global market and address technological and security challenges. The chapter provides practical insights for policymakers to create an enabling environment for startups, positioning India as a global leader in blockchain technology. Ultimately, the study offers a comprehensive approach for harmonizing innovation and regulation to support emerging startups leveraging blockchain.

CHAPTER 7 deals with the potential impacts of the Draft Digital Competition Bill on India's startup ecosystem, particularly its effects on smaller enterprises. It explores how the bill designates enterprises providing Core Digital Services (CDS) as Significant Strategic Digital Entities (SSDEs) based on financial thresholds and user base, aiming to address market dominance and unfair practices. The paper critically examines whether the bill effectively fosters fair competition or if it may inadvertently impose compliance burdens that could stifle innovation and deter investment, potentially hindering startup growth. It analyzes the implications of SSDE designation on the digital market landscape and discusses the need for tailored compliance measures and support systems to encourage innovation. Additionally, the chapter considers whether the existing competition law framework could be enhanced to tackle digital market challenges without introducing new legislation. Ultimately, it offers recommendations to ensure the bill supports the growth of homegrown startups while fostering a fair digital economy in India.

CHAPTER 8 explores the challenges and opportunities associated with the implementation of digital antitrust frameworks, particularly the Digital Competition Bill in India, inspired by the European Union's Digital Markets Act (DMA). The rise of anti-competitive practices in India's digital market, exacerbated by the dominance of large tech companies, has led to regulatory responses aimed at fostering competition and protecting startups. The chapter compares the Digital Competition Bill with the DMA, highlighting the discrepancies between developed and developing economies. Concerns regarding the bill's provisions, such as vague definitions, high thresholds, and potential overreach, are examined, especially in relation to their impact on startups. The challenges posed by the bill's regulatory framework, particularly regarding thresholds, tying, and bundling, are discussed. It is suggested that sector-specific market studies should be conducted by the Competition Commission of India before the bill's implementation, to ensure that its provisions are appropriately tailored to India's unique digital landscape.

CHAPTER 9 deals with the financial challenges faced by start-ups in India, focusing on governance, risks, and both internal and external hurdles.

It examines how different financial models impact the growth trajectory of start-ups, particularly during fluctuating economic conditions like the 2020-21 pandemic and financial crackdowns. The chapter advocates for integrating the Initial Coin Offering (ICO) model at early stages of start-up development, suggesting it can provide better financial and operational outcomes. It explores the dynamics of venture capital, regulatory disparities, and the need for frameworks on token governance and cross-border regulatory compliance. The paper presents an in-depth analysis of ICO fundraising metrics, proposing solutions to enhance start-up financial stability. Additionally, it discusses legal frameworks surrounding ICOs in India, while excluding accounting, taxation, and financial regulations. The chapter envisions ICOs as a pragmatic financial model for Indian start-ups amidst current market dynamics and global volatility.

CHAPTER 10 deals with the growing concern of startup acquisitions by large firms and the potential harm these transactions pose to competition and innovation. It examines the inadequacy of current antitrust laws, which often fail to regulate these acquisitions due to the challenges of proving anti-competitive effects. The chapter critiques the traditional approach of antitrust law, which prioritizes avoiding false positives over preventing anti-competitive behavior, a stance that is not suitable for the unique case of startup acquisitions. The author discusses how these mergers, especially those involving innovative startups, often serve to eliminate competition rather than foster market growth, leading to diminished incentives for innovation. Additionally, the chapter explores the negative impact on market dynamics, where competing firms exit, reducing bargaining power and lowering startup purchase prices. The study advocates for stronger antitrust enforcement and the introduction of new regulatory frameworks to better protect competition and innovation in the startup ecosystem.

CHAPTER 11 deals with the cyber security challenges faced by small businesses and startups, particularly in the context of technological advancements like big data. It examines the current state of cyber security issues, highlighting the gaps in knowledge and preparedness among entrepreneurs, policymakers, and support organizations. The chapter explores the vulnerabilities of startups due to weaknesses in their operational frameworks, making them susceptible to cyber-attacks. It further delves into the technical and legal requirements for robust cyber security defenses, emphasizing the role of government regulations, industry standards, and technological innovations such as AI and ML. The chapter also discusses the legal implications of non-compliance with cyber security regulations

and offers recommendations for a strong legal framework to help startups mitigate cyber risks. Ultimately, it aims to provide insights into how startups can strengthen their cyber security measures to protect customer and personal data while ensuring business continuity.

CHAPTER 12 deals with the challenges pharmaceutical start-ups face in balancing user privacy with business needs in the context of data collection. The first part of the chapter explores the necessity of data collection for pharmaceutical start-ups, highlighting its role in market suitability, financial assessments, and future planning. The second part delves into the ethical dilemmas of data gathering, particularly the tension between protecting privacy and meeting business requirements. The final section examines the impact of data privacy regulations on innovation, considering both global regulations and the new data protection laws introduced in India. It addresses how these regulations stimulate and constrain startup growth, emphasizing the delicate balance between safeguarding privacy and fostering innovation. The chapter ultimately provides insights for pharmaceutical start-ups on navigating this complex legal and ethical landscape, aiming to guide them in protecting privacy while driving progress in the industry.

CHAPTER 13 deals with the legal dimensions of governance, control mechanisms, and board composition in start-ups, particularly in the context of Venture Capital (VC) and Private Equity (PE) investments. It explores how start-ups, often funded by VC firms in their early stages and PE firms in their more mature phases, navigate the complexities of governance and control, which are key to securing funding and ensuring growth. The chapter examines the role of VC and PE firms not only in providing capital but also in offering technical and management expertise. It highlights the negotiable aspects of governance structures, particularly concerning board composition and veto rights, which can impact both the start-up's growth and the firm's investment protection. The study further delves into the legal implications of protective provisions, minority rights, and how these elements shape investment strategies and fundraising approaches, ultimately balancing the interests of investors and founders.

CHAPTER 14 deals with the intersection of securities regulations and startup investment strategies in India's financial ecosystem. It examines the impact of key legislative frameworks, such as the Companies Act, 2013, SEBI regulations, and the Startup India initiative, on the investment landscape for startups. While regulations aim to ensure market integrity and investor protection, they also impose compliance burdens that can deter potential investors. Key challenges discussed include compliance costs, disclosure

requirements, and the implications of SEBI's ICDR and AIF Regulations. The chapter also addresses SEBI's regulatory sandboxes and crowdfunding mechanisms, which seek to strike a balance between investor protection and flexible fundraising for startups. Additionally, the rise of digital assets and ICOs in India is explored, highlighting unique regulatory challenges. To enhance the startup ecosystem, the chapter proposes leveraging RegTech for efficient compliance and advocates for startup-friendly regulations and greater collaboration between regulators and startups to improve investment attractiveness.

CHAPTER 15 highlight overview of the venture capital (VC) and startup ecosystem in India is provided in this chapter, with emphasis placed on the regulatory and compliance challenges faced by stakeholders. The critical role played by venture capital in supporting early-stage startups through funding, mentorship, and strategic guidance is outlined. The exponential growth of India's startup ecosystem is highlighted, alongside the significant contributions made by venture capital to this expansion. However, attention is drawn to the complex regulatory framework governing VC operations, including those imposed by SEBI, RBI, and FEMA. Key challenges are discussed, such as investment restrictions, overlapping jurisdictions, and stringent compliance requirements, especially for foreign investors. The impact of regulatory hurdles on investor sentiment, capital flow, and startup scalability is examined. It is concluded that although regulations are intended to ensure market integrity, their complexity has often deterred participation, limiting the potential growth of India's venture capital landscape and innovation ecosystem.

CHAPTER 16 Discussing the significance of Intellectual Property Rights (IPR) for startups has been emphasized, highlighting how innovation can be safeguarded and leveraged for long-term success. The dual role of IPR—as a protective shield and a strategic asset—has been examined. The financial and strategic advantages of securing IP, such as increased investor confidence, market exclusivity, and branding, have been discussed. Challenges commonly faced by startups, including budget constraints, legal complexities, and lack of awareness, have been identified and solutions through strategic IP management have been proposed. Real-life examples have been cited to demonstrate the repercussions of neglecting IP protection. Strategies such as prioritizing key IP assets, using NDAs, provisional patents, and consulting IP professionals have been recommended. It has been contended that despite initial hurdles, the long-term benefits of robust IP protection far outweigh the costs. A proactive IP approach is thus urged to ensure competitiveness and sustainable growth.

CHAPTER 17 deals with the challenges posed by the increasingly anti-competitive digital market landscape, where a few dominant companies have been seen to restrict entry for new competitors. In response, the draft Digital Competition Bill, 2024, has been introduced by the Indian government. The chapter critically examines this Bill, along with reports of governmental committees, international practices, and concerns raised by industry experts. Particular focus has been placed on provisions relating to dominance thresholds, Associate Digital Enterprises, and data portability. It has been observed that emerging start-ups have been brought within the Bill's scope, potentially subjecting them to onerous compliance burdens that could hinder their growth. The need for differential treatment of emerging start-ups, as opposed to entrenched market players, has been emphasised. To address these issues, the chapter recommends a two-tier threshold mechanism and a blend of ex-ante and ex-post regulatory approaches, aiming to ensure a competitive digital market without stifling innovation.

The topics presented in each chapter are unique to this edited book and are based on the unpublished work of the contributing authors. In editing this book, I attempted to bring into discussion all the relevant Startup Law & Policy for creating a Startup ecosystem in society. I believe this book is ready to serve as a reference for larger audiences such as academicians, Research scholars, Industry experts, Law practitioners, Policy makers & entrepreneurs. I hope this edited book will serve its purpose and be useful for its readers.

Best Wishes,

Dr. Md Safiullah

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Dark Patterns and Online Gaming: Legal and Ethical Considerations

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Abstract: The online gaming industry is experiencing unprecedented growth, projected to reach \$276 billion globally by 2033, with India emerging as the second-largest market. However, this boom has brought ethical and legal concerns to the forefront, particularly around the use of dark patterns—deceptive design strategies that exploit players' psychological vulnerabilities. These include tactics such as time-gating (temporal), pay-to-win schemes (monetary), and social obligation pressures (social capital), which can compromise user autonomy and lead to compulsive behavior, especially among minors. This article explores dark patterns' legal and ethical implications in online gaming. It delves into their categorization, impact on user consent, and methods for mitigation through transparent game design and ethical UX practices. The paper critically analyzes regulatory frameworks in both the European Union and India, including the Digital Services Act, GDPR, AI Act, India's Dark Pattern Guidelines 2023, DPDP Act 2023, and IT Rules 2021. Emphasizing the fine line between engaging gameplay and manipulation, the article advocates for responsible game design that respects user autonomy, promotes informed decision-making, and ensures long-term player trust. It concludes by calling for industry-wide ethical standards and stronger compliance measures to counteract the growing risks associated with dark pattern deployment in online games.

Keywords: *Online Gaming, Dark Patterns, Data protection, GDPR, DPDP Act*

Introduction

The Online Gaming Market is projected to reach around \$ 276 billion by the year 2033 globally with a forecasted compounded annual growth rate of

about 11.2%. India's gaming market is currently valued at around \$3.1 billion as per the industry estimates. India currently ranks second with 442 million gamers as the 2nd largest gaming market in the world just behind China¹. These projections tell about how much potential the online gaming market carries with it. One of the prominent issues with the online gaming industry is dark patterns in games. The prevalence of dark patterns in online gaming presents a significant legal and ethical dilemma, as these manipulative design techniques exploit players' psychological vulnerabilities. Dark patterns often trick users into spending more money, divulging personal information, or making choices they would not have made under normal circumstances. These practices include strategies like "distressing" users with constant reminders, hiding essential information in complex terms, or using emotional triggers such as time-limited offers to pressure decision-making.

From a regulatory standpoint, dark patterns have attracted attention in regions such as the European Union, where the Digital Services Act (DSA), AI Act, and General Data Protection Regulation (GDPR) provide legal frameworks to combat these deceptive tactics. In India, where online gaming is on the rise, emerging frameworks like the Dark Pattern Guidelines 2023, the Digital Personal Data Protection 2023 (DPDP) Act, the Information Technology Act 2000, and the BNS (Bharatiya Nyaya Sanhita 2023) Act are expected to address these concerns.

This article explores the intersection of dark patterns and the legal landscape for online gaming businesses, analyzing their impact on player autonomy, regulatory compliance, and business ethics. It further assesses the risks posed to companies by continuing to rely on such manipulative practices.

Understanding Dark Patterns Usage in Online Games

(A) **Common Dark Patterns Used in Online Games** There exist numerous dark patterns however the most prominent ones that are used in the Online Gaming Industry can be categorized into 3 groups (i) Temporal (ii) Monetary (iii) Social.

(i) **Temporal Dark Patterns** include 'Grinding²', and 'Play by Appointment' that compel a player to invest excessive time in a game.

¹ Indian Gaming Industry to Grow to \$8.92 Billion in Next 5 Years: Report, Bus. Standard (July 9, 2024), https://www.business-standard.com/industry/news/indian-gaming-industry-to-grow-to-8-92-billion-in-next-5-years-report-124070900896_1.html

² Veli-Matti Karhulahti, *Vitality structures in 'addictive' game design*, <https://open-research-europe.ec.europa.eu/articles/4-47>

Grinding requires players to engage repetitively in the tedious tasks for in-game rewards leading to frustration and diminished gaming experience. Whereas the ‘Play by Appointment³’ pattern restricts the gameplay to predetermined times forcing the players to wait for a generation of the resources. This creates a sense of annoyance and lack of control amongst the players leading to in-game purchases expediting their gaming experience.

To mitigate the *Temporal dark patterns* gaming companies can limit daily gaming hours or introduce breaks after certain time intervals in the gameplay for the players. They may also develop balanced reward systems where rewards are proportional to effort, not based solely on time spent, mitigating the need for repetitive grinding. The developers should disclose how much time a task or reward will take upfront, ensuring players are informed before grinding tasks.

(ii) ***Monetary Dark Patterns*** are designed to extract money from the players under the semblance of enhancing gameplay. The ‘Pay-to-win⁴’ or ‘Pay-to-skip’ pattern allows the player to bypass the challenges by paying real money in gameplay. This practice can feel exploitative at times. The “Pay to Win” dark pattern⁵ is when a game incentivizes spending real money to gain advantages over other players, making it difficult for free-to-play (F2P) players to compete. This involves accelerating in-game currency earnings or unlocking exclusive items that provide unfair benefits. It creates a significant imbalance, favoring those who spend the most. Another problematic concern is ‘Pre-Delivered Content⁶’ as a dark pattern. Pre-delivered content⁷ uses “Starter Pack” and “Premium Cosmetic” mechanics, offering power-ups and bonuses early in exchange for in-game currency or selling decorative items like character skins for real money. These mechanics, common in PvP games, allow

³ Thomas de Haan, *Dark Patterns in Games: How Do They Influence Player Experiences and Their Willingness to Give Up Personal Information* (2022) (Bachelors Thesis, Radboud University), https://www.cs.ru.nl/bachelors-theses/2022/Thomas_de_Haan___1024718___Dark_patterns_in_games_-_how_do_they_influence_player_experiences_and_their_willingness_to_give_up_personal_information.pdf.

⁴ Ibid

⁵ Ibid

⁶ PETIR: Jurnal Pengkajian dan Penerapan Teknik Informatika, Vol. 15, No. 2, Page 194, September 2022, P-ISSN 1978-9262, E-ISSN 2655-5018, DOI: <https://doi.org/10.33322/petir.v15i2.1151>, Access Here

⁷ Ibid

players to differentiate themselves but provide little to no gameplay advantage, which is why their impact on fairness is considered low.

To mitigate the *Monetary Dark Patterns*, gaming companies should disclose how in-game purchases affect gameplay balance. This can be achieved through labeling systems that highlight whether a game is *pay-to-win*, ensuring transparency for consumers. The companies may also implement age-based restrictions or limits on in-game purchases for minors. This will limit the children's exposure to monetary dark patterns. The game developers can create balanced systems where free-to-play (F2P) players have competitive chances without requiring payments.

(iii) **Social Capital Dark Patterns** are designed to exploit the social network of gamers. Dark patterns like 'Social Obligation' in online games⁸ occurs when players feel pressured to play as they belong to a team, guild, or clan. Many games restrict solo play, making it almost necessary to join a group. Players often log in, not for fun, but to avoid letting their teammates down. This pressure intensifies with scheduled events, like raids, that force players to adjust their schedules. The social obligation also ties into the "Pay to Win" pattern, as players may feel forced to spend money to keep up with their team, turning gaming into a stressful, unwanted responsibility.

To mitigate the *social capital dark patterns*, companies should introduce opt-out mechanisms for social obligations, where players can choose to play solo or take breaks without facing penalties from their team or guild. Whereas the developers can design group-based activities that accommodate different playstyles, such as offering flexible schedules or alternate ways to contribute to teams that do not demand constant participation.

Ethical Concerns

In the fast-paced landscape of the Online Gaming Industry, the implementation of Dark pattern design strategies raises ethical concerns. These are the tactics that increase user engagement and retention by compromising their autonomy and well-being very often. Dark Patterns are evident in several forms such as forced continuity, hidden costs, deceptive design that misleads to unintended purchases, or excessive time spent in the game. These techniques however can derive short-term benefits for the gaming entities,

⁸ Sam, Thomas, Nima, Susanne & Rainer, *Level Up or Game Over: Exploring How Dark Patterns Shape Mobile Games*, (2024), International Conference on Mobile and Ubiquitous Multimedia (MUM '24), Stockholm, Sweden, isbn: 979-8-4007-1283-8/24/12, <https://arxiv.org/html/2412.05039v1>

in the long run, it will undermine the user trust and satisfaction. This also leads to the erosion of trust amongst the gamers community where they not only invest their time but also their money.

While the Game Developers or the Gaming entities are developing the user interface of their games, they must consider a few things in order⁹ to ensure the game is ethically developed:

- *Are they enhancing the experience of users or just exploiting psychological vulnerabilities?*
- *Are they respecting the user autonomy?*
- *Are they respecting the time of the users?*
- *Are they prioritizing long-term player satisfaction or just focusing on short-term engagement metrics?*
- *How do the gamification strategies impact the user's well-being and mental health?*
- *Are they creating value for the gamers or doing it just for the sake of business and profit generation?*

These are some of the primary ethical considerations that a game developer must ponder while developing the User Interface of the Game.

There is a very thin borderline between engaging gameplay¹⁰ and user manipulation, and when these game mechanics are engineered to take advantage of cognitive biases this leads to ethical issues in user consent thereby leading to the exploitation of the users. An ethical design should always prioritize user autonomy. Usage of dark patterns often leads to compulsive behavior¹¹ of the gamers especially the children who are most vulnerable to it. So, it's the responsibility of the developers to consider how their design choices influence the user's health and mental well-being. They have to ensure that it is not impacting the health of the user in a negative way. Moreover, the business should focus on making a balance between the desire for immediate results and retaining the loyal users of the game.

The strategies that the gaming entities and developers may consider for¹² implementation to provide an ethical gaming experience are:

⁹ Jacob Gruver, *The Dark Side of Gamification: Ethical Challenges in UX/UI Design*, Medium (May 9, 2021), <https://medium.com/@jgruver/the-dark-side-of-gamification-ethical-challenges-in-ux-ui-design-576965010dba>.

¹⁰ *Online Games Use 'Dark Designs' to Collect Players' Data, Finds Study*, The Economic Times (Oct. 31, 2024), <https://economictimes.indiatimes.com/tech/technology/online-games-use-dark-designs-to-collect-players-data-finds-study/articleshow/104795376.cms?from=mdr>.

¹¹ Ibid

¹² Lukasz Olejnik, *Unmasking Dark Patterns in Video Games*, Internet Policy Review (Aug. 25, 2022), <https://policyreview.info/articles/news/unmasking-dark-patterns-video-games/1739>.

- The developers should clearly communicate the game mechanisms to the users enabling informed choices for users. This will foster user trust in the gameplay and will ensure transparency and user engagement.
- The developers should also provide users with opt-out features regarding their preferences, thereby countering the dark pattern design techniques.
- The developer should focus on rewarding the user's positive behavior in-game rather than following a punitive or coercive approach for disengagements, as it will enhance the user experience.
- The developers should keep on conducting regular assessments of their UI-UX and surveys on user behavior as it will help them to identify harmful or deceptive design patterns in the game, if any, and make strategies accordingly.

Legal Framework and Compliance Issues around the world

Framework in the European Union

European Union has strictly regulated Dark Pattern usage under the Digital Services Act, The Data Act, The GDPR, and the latest AI Act.

The Digital Services Act

Under the Digital Services Act (DSA), Article 25 recognizes dark patterns as a form¹³ of manipulation in online platforms. It states that online platforms must not design, organize, or operate their online interfaces in a way that deceives or manipulates users, or distorts their ability to make free and informed decisions. Whereas in the definition part, Article 3 defines an “Online Platform” as any software, application, or website extending the scope of dark patterns prohibition to these interfaces.

The Data Act

Under the Data Act¹⁴, Recital 38 describes¹⁵ dark patterns as techniques designed to push or deceive consumers into harmful decisions, especially related to data disclosure. It emphasizes that businesses should avoid dark patterns, particularly those violating data minimization principles under the GDPR.

¹³ William Fry, *Dark Patterns: Not a new concept but will now be heavily regulate*, Lexology, <https://www.lexology.com/library/detail.aspx?g=9495f7f9-690b-4549-8828-c9c342108384>

¹⁴ Regulation (Eu) 2023/2854 of the European Parliament and of the Council, <https://eur-lex.europa.eu/eli/reg/2023/2854>

¹⁵ Supra Note 13

The AI Act

AI can be deployed by game developers to manipulate gamers via dark patterns. AI algorithms can be used by developers to personalize dark patterns based on browsing history, social media activity, and metadata usage in the gameplay. This would be even harder to recognize by the gamers that they are being manipulated in the game. AI can also be used to develop sophisticated dark patterns like for generating fake reviews, testimonials, endorsements which appear to be more convincing and harder to detect than those created by normal human beings. EU AI act¹⁶ tackles this under Article 5 which prohibits certain practices that exploit human vulnerabilities or manipulate behavior. This provision regulates manipulative design strategies, by focusing on practices that distort a user's behavior without their full awareness or that exploit their vulnerabilities. Article 5(1)(a)¹⁷ prohibits AI systems from using subliminal, deceptive, or purposefully manipulative techniques that impair users' abilities to make informed decisions, especially when this manipulation could lead to significant harm. Certainly, this implies the restriction on the usage of dark patterns by developers.

Global Data Protection Regulations

GDPR doesn't explicitly mention dark patterns or manipulative designs, however, its principles, like transparency¹⁸, fairness¹⁹ and informed consent²⁰ oppose the dark patterns usage. GDPR mandates that data controllers obtain informed consent from their users which should be given by a clear affirmative action, and the information about the processing of the data should be in easily understandable language. GDPR promotes data protection by design and that too by default under Article 25²¹ which requires data controllers to implement measures that ensure compliance with the regulations and the privacy settings set at high level by default.

Framework in India

Dark Patterns in India are regulated under the Dark Pattern Guidelines 2023, Digital Personal Data Protection Act, 2023, and The Information Technology Rules (Intermediary Guidelines & Digital Media Ethics Code) 2021.

¹⁶ (COM(2021)0206 – C9-0146/2021 – 2021/0106(COD)), Artificial Intelligence Act, https://www.europarl.europa.eu/doceo/document/TA-9-2024-0138_EN.pdf

¹⁷ Ibid

¹⁸ Principles relating to processing of personal data, <https://gdpr-info.eu/art-5-gdpr/>

¹⁹ Ibid

²⁰ Ibid

²¹ Data protection by design and by default, <https://gdpr-info.eu/art-25-gdpr/>

Dark Pattern Guidelines

In 2024 Ministry of Consumer Affairs released the guidelines to regulate Dark Patterns. The guidelines define “Dark patterns” as deceptive UI/UX designs that mislead or trick users into unintended actions, undermining consumer autonomy, decision-making, or choice, often constituting misleading advertisements, unfair trade practices, or consumer rights violations. It mentions 13 types of dark patterns that are applicable to platforms offering goods or services in India, including foreign entities. Some of the prominent²² dark patterns listed in the guidelines that will prominently fall under the ambit of gaming are ‘Drip pricing’, ‘subscription traps’, ‘false urgency’, and ‘forced action’. Drip pricing²³ involves withholding the full price or certain elements of the price at the point of initial purchase. For instance, a gamer might purchase what appears to be a full game, only to find that additional payments are necessary to unlock further levels or features. Subscription traps²⁴ involve mechanisms that make it difficult or frustrating for consumers to unsubscribe. In gaming, these traps manifest when platforms attach severe consequences for unsubscribing from a service, or when the process to unsubscribe is overly complicated, hard to find, or requires numerous steps. Forced action²⁵ is a dark pattern where a gamer is coerced into acting to proceed with the original gaming experience. Rule 3²⁶ states that these guidelines shall apply to all the platforms systematically offering goods or services in India, whereas Rule 4²⁷ explicitly states no person.0[p-g, including platforms, shall engage in using any of the dark pattern’s practices.

Data Protection Law

The DPDP Act mandates that ‘Consent’²⁸ must be free, specific, and informed. It also has to be unconditional and unambiguous²⁹ obtained through a clear affirmative action. If we look at Dark Patterns, they tend to

²² *India's Dark Patterns Guidelines and What Game Developers Should Know*, Gambling Insider (Nov. 2, 2023), <https://www.gamblinginsider.com/magazine/805/indias-dark-patterns-guidelines-and-what-game-developers-should-know>.

²³ Ibid

²⁴ Ibid

²⁵ Ibid

²⁶ Application: The Dark Pattern Guideline 2023.

²⁷ Prohibition: The Dark Pattern Guideline 2023.

²⁸ Section 6, The Digital Personal Data Protection Act, 2023

²⁹ Srija Naskar, *Dark Patterns – Beyond Consumer Protection Law*, CCG NLU Delhi (Apr. 1, 2024), <https://ccgnludelhi.wordpress.com/2024/04/01/dark-patterns-beyond-consumer-protection-law/>.

be deceptive and coercive in nature, so if any gaming business applied dark patterns such as ‘Forced Consent’ to the collection or processing of the data, it can be held responsible under the DPDP Act³⁰. The gaming business has to ensure that consent is obtained from the players without intimidation, coercion, deception, or any significant negative consequences. The DPDP Act also mandates³¹ the Data Fiduciaries to prove that valid consent was provided by the user, here the gaming entity being a data fiduciary has to ensure that consent was obtained in a free and informed manner and not by any dark patterns. If the consent was taken by any nudge or deceptive design then it may incur penal liabilities. The DPDP Act also imposes a purpose limitation³² which means the personal data can be processed to the extent required for the specific purpose the player consented to. The gameplay can’t trick the user and provide excessive data unrelated to that purpose.

The recently released draft of DPDP Rules 2025 mandates online gaming intermediaries³³ to delete user data in 3 years. Dark patterns often involve manipulating users into providing personal data through deceptive or opaque consent mechanisms. Now the gaming platforms will be required to clearly explain what data is being collected and for what purposes, thereby countering practices such as *forced action*, where users may be pressured into sharing unnecessary data. Dark patterns may exploit user data retention, using tactics like *subscription traps* or *nagging*, where users are persuaded to provide data for ongoing services that they may not need or want. The DPDP rules stipulate that platforms must delete³⁴ personal data once it is no longer needed. The DPDP rules require platforms to notify users at least 48 hours³⁵ before erasing their personal data, allowing them time to log in or request data retention. This gives users the opportunity to make informed decisions about their data and ensures they are not tricked into losing access to their personal information without consent.

Information Technology Law

The Dark Pattern Guidelines 2023 mentions the word ‘platform’³⁶ in the context of usage of dark patterns, whereas, in its definition section, it defines

³⁰ Supra Note 23

³¹ Supra Note 24

³² Section 7, The Digital Personal Data Protection Act, 2023

³³ Schedule III, Draft, Digital Personal Data Protection Rules 2025

³⁴ Ibid

³⁵ Ibid

³⁶ Rule 2(g), Dark Pattern Guidelines 2023

‘platform’ as having the same meaning as defined³⁷ under the Consumer Protection E-Commerce Rules 2020 (“E-Commerce Rules”). The recently released draft of DPDP Rules 2025 also mentions of ‘online gaming intermediaries³⁸’ in its third schedule. The Information Technology Act and The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (“IT Rules 2021”) don’t explicitly state anything about the dark patterns. It is pertinent to note that, Rule 5 of the E-Commerce Rules states that A marketplace e-commerce entity seeking exemption from liability under Section 79(1) of the IT Act, 2000, must comply with Section 79(2) and (3) and adhere to the IT (Intermediary Guidelines) Rules, 2011. Compliance with these provisions is mandatory to qualify for the exemption.

We can therefore say that The Dark Pattern Guidelines 2023 adopt the definition of ‘platform’ from the Consumer Protection E-Commerce Rules 2020, extending its applicability to e-commerce entities. This ensures that entities engaging in consumer-facing services, including online gaming platforms and marketplaces, fall under the ambit of regulations targeting dark patterns. The draft DPDP Rules 2025 explicitly references ‘online gaming intermediaries’ in its third schedule, highlighting a focus on data protection compliance and potential misuse through dark patterns, such as misleading consent mechanisms or forced actions during data collection. Platforms, including e-commerce marketplaces, must comply with Section 79(2) and (3) of the IT Act, along with the IT Rules 2011 and subsequent IT Rules 2021, to seek liability exemptions. Dark patterns that mislead consumers or exploit user interface designs could breach these provisions, undermining claims of due diligence or safe harbour protections. This creates a regulatory nexus that implicitly holds intermediaries accountable for incorporating dark patterns that contravene consumer protection or data privacy norms.

Judicial Precedents Globally concerning Dark Patterns

Loot Boxes³⁹ in online games are prominent forms of dark patterns operated via monetized rivalries and currency confusion, which is one of a type of dark pattern commonly used in online games. Often analogized to gambling, loot boxes are more precisely described as “gambification,” which means⁴⁰ the

³⁷ Rule 3(i), E-Commerce Rules 2020

³⁸ Schedule III, Draft Digital Personal Data Protection Rules 2025.

³⁹ Scott A. Goodstein, *When The Cat’s Away: Techlash, Loot Boxes, and Regulating “Dark Patterns” In the Video Game Industry’s Monetization Strategies*, University of Colorado Law Review [Vol. 92, 2021]

⁴⁰ Ibid

use of gambling-like mechanisms for non-gambling purposes like enticing players through elements typically seen in gambling, like immersive sounds, players, and weapons skins, coins, randomized rewards, and visual effects. These mechanisms prompt users, especially younger and more vulnerable players, to engage repeatedly, hoping to acquire items that enhance their in-game status or competitive edge, thus creating monetized rivalries. The design of loot boxes intentionally blurs the line between virtual and real currency, as players are encouraged to purchase in-game currency with real money to access these rewards, thereby creating “currency confusion.” In *N.A by and through his Guardian vs Nintendo of America⁴¹* Inc. Nintendo faced backlashes against loot boxes where a lawsuit was filed against the company claiming that the video game was having ‘dark patterns’ to trick young players into spending money on *Mario Kart Tour* ‘immoral’ microtransactions. When first released in 2019, it contained ‘Spotlight Pipes’ which acted as a loot box with undisclosed odds. Players could use real-world money to open in the hopes of receiving in-game upgrades and items. Nintendo is currently facing a class action suit over a loot-box-like item from a father whose child ended up spending \$170+ on the Spotlight Pipes by using his credit cards connected with the game. It was also alleged that the use of a loot box mechanism in the game capitalized on the addictive behaviour of the game, which targets children who are vulnerable to this.

In the *Epic Games Case⁴²* The Federal Trade Commission imposed a fine of \$245 million on Epic Games because it used dark patterns in its game to manipulate players, including children to make unintended purchases thereby making it difficult for them to seek refunds for the previously made in-app purchases in the game. The gameplay included the use of dark patterns like ‘Hard to Cancel’ and ‘Obstruction’ to complicate the refund process.

In *District of Columbia vs Google LLC⁴³*, the court held that Google misled users by employing dark patterns, making them believe they had disabled location tracking while continuing to collect their geolocation data. The company was also found to have falsely implied that certain features would not function properly without enabling location services. As part of the settlement⁴⁴, Google agreed to implement clearer disclosures, including

⁴¹ 4:23-cv-02424-DMR, <https://www.classaction.org/media/na-v-nintendo-of-america-inc.pdf>

⁴² DOCKET NO. C-4790, https://www.ftc.gov/system/files/ftc_gov/pdf/1923203epicgamesfinalconsent.pdf

⁴³ Superior Court of District of Columbia, 24th January 2022, <https://oag.dc.gov/sites/default/files/2022-01/DCv.Google%281-24-22%29.pdf>

⁴⁴ Settlement Agreement, <https://oag.dc.gov/sites/default/files/2022-12/2022.12.29%20DC-Google%20Settlement%20Agreement%20%5Bfor%20signature%5D.pdf>

pop-up notifications informing users about location tracking and how they could disable it. This case emphasized the importance of transparency and explicit user consent, particularly concerning sensitive data like geolocation.

In the case of *TikTok Technology Limited*⁴⁵ the Data Protection Commission of Ireland fined Tiktok € 345 million for violating fairness principle under Article 5(1)(a) of GDPR. TikTok used dark patterns that pushed the children towards privacy-intrusive settings which were in contravention to the fairness principle of GDPR. The platform's default public settings for new accounts, coupled with pop-up notifications that used tactics like Preselection, Visual Interference, and Forced Action, hindered children from making neutral privacy choices.

In the case of *Microsoft Ireland Operations Ltd*⁴⁶, the French Data Protection Authority fined Microsoft €60 million as it was using dark patterns in “bing.com” which made it easier for the users to accept cookies than to refuse them, it violated GDPR consent requirements. The users had to click twice to refuse the cookies while acceptance required only one click thereby discouraging refusal. Microsoft was also ordered to rectify its cookie practices or face additional penalties.

Conclusion and Recommendations

The rise of dark patterns in online games poses significant legal and ethical risks for gaming businesses. While these manipulative techniques may drive short-term gains, they ultimately undermine player trust, ethical design standards, and long-term business sustainability. As regulators in India and globally tighten their scrutiny of dark patterns, gaming companies must prioritize user autonomy, transparency, and fairness in their design strategies to remain compliant with evolving legal frameworks. Gaming businesses that continue to exploit dark patterns may face increased legal scrutiny, financial penalties, and reputational damage. To mitigate these risks, developers and companies should adopt ethical design practices that foster positive player experiences, safeguard mental well-being, and comply with applicable laws such as the Dark Pattern Guidelines, The DPDP Act and IT Act 2000 in India. Only by aligning business strategies with ethical and legal standards can gaming companies achieve long-term success and cultivate trust within the gaming community.

⁴⁵ DPC Inquiry Reference: IN-21-9-1, Access [Here](#)

⁴⁶ Deliberation SAN-2022-023 of December 19, 2022, Access [Here](#)

Some recommendations that can help businesses promote⁴⁷ ethical gameplay and curb dark patterns are:

- **Establishing a Code of Ethics for Game Developers:** The industry bodies can establish a code of ethics for game developers and companies that will outline acceptable practices regarding user engagement, monetization, and player welfare. The primary aim of the code should be to foster a culture of responsibility that prioritizes player well-being while ensuring profitability.
- **Incorporation of Ethical Design Principles in Game Development:** It is crucial for the developers to consider the UI-UX of gameplay in an ethical manner. Their focus should be on creating engaging experiences without resorting to manipulative tactics. This includes avoiding pay-to-win mechanics and ensuring that gameplay remains fair for all players, regardless of their spending habits.
- **Robust Reporting and Moderation:** We often see dark patterns in games lead to toxic behaviour of the players as it disturbs their mental well-being. To combat this, online gaming communities should establish strong reporting mechanisms and moderation tools. These systems can help create a safer environment for players by addressing harassment and promoting respectful interactions within the community.

⁴⁷ *Playing It Straight: Video Games and Online Choice Architecture*, Taylor Wessing (2024), <https://www.taylorwessing.com/en/interface/2024/the-video-game-industry-in-2024/playing-it-straight-video-games-and-online-choice-architecture>.

2

Mapping India's Digital Health Revolution: AI-Powered Innovation and Emerging Challenges

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Abstract: India's digital health sector is experiencing rapid growth, driven by technological advancements, increased internet penetration, and government initiatives like the National Digital Health Mission (NDHM). Artificial Intelligence (AI) is playing a pivotal role in transforming healthcare, from diagnostics to treatment planning. However, the integration of AI and digital health technologies presents significant ethical and legal challenges. Key issues include data privacy, informed consent, regulatory uncertainty, and equitable access to healthcare services. Existing regulations, such as the Telemedicine Practice Guidelines and the Drugs and Cosmetics Act, have not fully addressed the complexities of digital health. Proposed frameworks like the Digital Personal Data Protection (DPDP) Bill aim to enhance data protection but have faced criticism for potential overreach and insufficient safeguards. This paper examines the current regulatory landscape, identifies emerging challenges, and advocates for a comprehensive, rights-based approach to digital health regulation in India.

Keywords: *Artificial Intelligence in Healthcare, Health Data Privacy, AI in Healthcare, Digital Health India, Digital Health Regulations.*

Introduction to Digital Health

The digital health industry in India is rapidly evolving, driven by advances in technology, increasing internet penetration, and the government's push towards digitalization. The pandemic highlighted the need for virtual technology in accessing medical services and pharmaceutical distribution. Fast forward to the current landscape, Artificial Intelligence ("AI") has

become a mainstay and continues to permeate society¹. By using machine learning to explore computer algorithms that enhance task performance based on past experiences, AI can minimize diagnostic and treatment errors that occur in human clinical practice. AI can also be involved in telemedicine, robotic surgery, clinical judgment and diagnosis, precision medicine, and drug discovery². For example, AI-powered digital pathology epitomises a transformative era in traditional pathology, integrating cutting-edge imaging and AI technologies to significantly elevate diagnostic precision and therapeutic efficacy. Its seamless assimilation into clinical workflows underscores its potential to furnish tailored treatment modalities in alignment with the objectives of precision medicine.

However, it is imperative to note that in India, the demand for healthcare services far outweighs the supply of physicians, resulting in a shortage of physicians to meet the growing need. To optimize patient care and utilization of medical resources, it is imperative to move from manual healthcare systems to automated ones. AI-integration into the existing framework needs to be executed concurrently with the professional development of healthcare practitioners as this step paramount to fully capitalise on digital health's transformative potential in advancing medical practice.

Overview of the Key Digital Health Regulations

Notwithstanding the unprecedented progress of digital health in India, the regulatory framework governing this sector is a complex maze of different regulations and continues to develop. We have discussed hereinbelow certain key regulations.

Telemedicine: The practice of telemedicine and provision of online medical consultations by healthcare practitioners is governed and regulated by the Telemedicine Practice Guidelines,2020. These guidelines provide a framework for the practice of telemedicine in India, outlining the roles, responsibilities, and ethical guidelines for healthcare providers. Interestingly, these guidelines stipulate that technology platforms based on AI/ machine learning are not permitted to counsel patients or prescribe any medicines. Further, while AI may be used to assist and support a doctor on patient

¹ Safiullah, M., & Parveen, N. (2022). Big data, artificial intelligence and machine learning: a paradigm shift in election campaigns. *The new advanced society: Artificial intelligence and industrial internet of things paradigm*, 247-261.

² Biplob Lenin, *AI in Indian Healthcare: The Future Is Now, But Are We Ready?*, NDTV Profit (Aug. 23, 2024), <https://www.ndtvprofit.com/opinion/ai-in-indian-healthcare-the-future-is-now-but-are-we-ready>.

evaluation, diagnosis or management, the final prescription or counselling has to be directly delivered by the doctor³.

Online Pharmacies: The Drugs and Cosmetics Act, 1940 read with the Drugs Rules, 1945 regulate the sale and distribution of drugs, including online pharmacies. However, given that the currently applicable regulatory framework was developed for the physical sale of drugs in brick-and-mortar pharmacies, the revision of the framework for effective regulation of online sale of drugs remains pending.

Health Data Protection: The Digital Information Security in Healthcare Act (“**DISHA**”) was an attempt by the Government of India to secure the healthcare data of patients in India. The MoHFW had drafted DISHA with the objective to ensure data privacy, confidentiality, reliability and security of digital health data. Some key provisions of DISHA include creation of regulatory and adjudicating authorities at the national and state level, setting up of Health Information Exchange, rights of the owners of health data and duties of the collectors, generators, and processors of digital health data⁴.

Electronic Health Record Standards: The Electronic Health Record Standards for India, 2016 (“**EHR Standards**”) notified by the MoHFW lays down a set of recommendatory principles with respect to disclosure, privacy, and security of electronic health records. An ‘electronic health record’ is defined in a broad-based manner to mean “*a collection of various medical records that get generated during any clinical encounter or event*.” The EHR Standards specify that data would be ‘totally anonymized’ on removal of the certain specified identifiers from datasets.

Software as Medical Devices: Insofar as the software handling data used/created by digital health platforms are concerned, software is now classified as a medical device under the Medical Devices Rules, 2017 (“**MD Rules**”). The regulatory regime surrounding medical devices, as it existed post the introduction of the MD Rules, changed on February 11, 2020, with a revision in the definition of “drugs” under the Drugs and Cosmetics Act, 1940. The revision, designed to bring all medical devices under the ambit of the regulatory regime prescribed under the MD Rules, took effect from April 1, 2020. This new regime, which expanded the scope of regulatory coverage to

³ Biplab Lenin & Priyam Rajkumar, *Double Check: Decoding India’s Dual Framework for Medical Device Labelling*, India Corp. L. Blog (Feb. 25, 2025), <https://corporate.cyrilamarchandblogs.com/2025/02/double-check-decoding-indias-dual-framework-for-medical-device-labelling/>

⁴ Salim Omambia Matagi & Satoshi Kaneko, *Challenges and Opportunities on Data Protection and Privacy in Healthcare*, 5 Int'l J. Sci. Res. Updates 23 (2023), <https://orionjournals.com/ijsrn/sites/default/files/IJSRU-2023-0001.pdf>.

encompass all medical devices, indicated the Government's concerted effort to enhance the safety and efficacy of medical device standards across the board⁵.

Emerging Challenges and the Way Ahead

The digital health landscape in India is advancing at an exciting pace, yet there exist multiple challenges and roadblocks which must be mitigated in order to ensure that the healthcare services in India are able to fully harness and utilize the advent of digital health technologies. Some key challenges include:

- *Data Privacy and Security:* The protection of health data is a significant challenge, especially with the increasing number of digital health platforms. Ensuring compliance with data protection laws and safeguarding against cyber threats is critical.
- *Interoperability:* Integrating various digital health systems and ensuring they can communicate with each other is essential for creating a cohesive digital health ecosystem. However, achieving interoperability across platforms remains a challenge.
- *Regulatory Uncertainty:* The digital health sector in India is relatively new, and the regulatory framework is still evolving. This uncertainty can create challenges for businesses and healthtech start-ups trying to navigate the legal landscape.
- *Access to Technology:* Despite the increasing internet penetration, there is still a significant digital divide in India, particularly in rural areas. Ensuring equitable access to digital health services across different regions and populations is a challenge.
- *Ethical Concerns:* Issues such as informed consent, patient autonomy, and the quality of care provided via digital platforms need careful consideration. The ethical implications of AI-driven healthcare solutions are also a concern.
- *Training and Awareness:* Healthcare providers need to be adequately trained to use digital health tools effectively. Additionally, raising awareness among patients about the benefits and limitations of digital health is crucial.

⁵ *Software as a Medical Device: FDA Digital Health Regulation*, Deloitte (May 9, 2019), <https://www2.deloitte.com/us/en/pages/public-sector/articles/software-as-a-medical-device-fda.html>.

- *Regulatory Compliance for Startups:* Startups in the digital health space may find it challenging to navigate the regulatory landscape, especially in areas like data protection, telemedicine, and online pharmacies.
- *Quality Control and Standardization:* Ensuring that digital health services meet the required quality standards and are consistently reliable is a significant challenge, given the diversity of services and providers.

While AI holds significant promise for transforming healthcare, enhancing decision-making, diagnostics, and patient care, its integration into the existing healthcare services framework must be approached with caution. Ensuring transparency, fairness, and accountability in AI development and deployment is critical to addressing ethical concerns and securing public trust. Future efforts should focus on establishing robust standards for evaluating AI algorithms and carefully considering the legal and ethical implications of AI's use in healthcare. By doing so, we can harness the full potential of AI to revolutionize healthcare, while safeguarding patient rights and ensuring equitable access to these advancements.

3

Sailing Uncharted Seas – Analysing the Implications of the Digital Personal Data Protection Act and AI Regulation on Start-Up Innovation and Growth in India

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Abstract: The blossoming of tech start-ups in India coupled with the commodification of data and the development of Artificial Intelligence (“A.I.”) technology has led to deliberations on fundamental questions of law on subjects such as authorship for A.I. generated work, the implications of data usage for A.I. powered search engine development, the commercialisation and monopolisation of data, and the general implications of data collection and processing for routine business practices. The Digital Personal Data Protection Act (“DPDPA”) – although a step in the right direction, imposes restrictions on the fundamental nature of business activities such as data collection and processing for practices such as cold calling and advertising. Compliance with the DPDPA (in its current form) can restrict the legitimate leveraging of data for entrepreneurial activities.

This piece seeks to contextualise the various intricacies of data privacy concerns in the age of Generative A.I. and attempts to strike a balance between consumer privacy and commercial freedom through proposing possible amendments to the DPDPA including, *inter alia*, a sub-categorisation of data into sensitive personal data and differential treatment of the same. Additionally, it seeks to provide a structure to the proposed Digital India Act through an analysis of a risk-based v. use-case approach to regulation, and recommendations on safeguards for A.I. use – upon a consideration of case studies and of existent regulation on the subject.

Keywords: *Sensitive Personal Data, Generative A.I., Risk-Based, Use-Case, Commercial Freedom.*

Upending the Nature of Business Activities in India – Analysing the Impact of The Digital Personal Data Protection Act, 2023

The Digital Personal Data Protection Act, 2023 (“DPDPA”) presents unprecedented challenges and opportunities for businesses in India. The Act imposes strict limitations on data collection and processing guided by the principle of purpose limitation, and also prescribes the right to erasure of data. As a consequence, it is likely to upend the very nature of a number of routine business activities – particularly performed by the sales and advertising teams of start-ups.¹ Data collection is a crucial activity, such as cold calling and for analysis of customer data to provide future products and/or services that are more likely to benefit a business’ sales. Strict adherence to the principle of purpose limitation and strict consent mechanisms - whilst progressive in nature and appreciable for its intended purpose of protecting consumer privacy, risks straightjacketing relatively smaller start-ups and encouraging the concentration of data with larger market players.² The European counterpart to the DPDPA – the GDPR has been observed to dramatically increase costs of data collection and processing.³ Theoretically, strict privacy regulation enforcement may impinge upon the freedom desired by start-ups and small companies whilst largely being a non-issue to bigger firms. This may lead to the creation of oligopolistic market structures.⁴

On the other hand, attention must be drawn to the DPDPA’s effect of potentially endangering consumer privacy through allowing a free reign to enterprises to utilise individuals’ personal but publicly available data for unspecified purposes. Section 3 (c)(ii)(A) of the DPDPA explains that “personal data made or caused to be made publicly available by the data principal to whom it relates” shall not be subject to the application of the DPDPA. Unlike the General Data Protection Regulation (“GDPR”), the DPDPA does not sub-categorise personal data into sensitive and other personal data. It is important to consider the fact that social media users often post personal information on such public platforms on subjects such as political views, race-based, and linguistic data which can prove to be sensitive

¹ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

² James Bessen, Stephen Michael Impink, Lydia Reichensperger, Robert Seamans, *GDPR and the Importance of Data to AI Startups*, 54(5) RESEARCH POLICY 1, 1 (2022), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3576714#paper-citations-widget.

³ *Id.*

⁴ Campbell, J., Goldfarb, A., and Tucker, C., 2015. *Privacy Regulation and Market Structure*, JOURNAL OF ECONOMICS & MANAGEMENT STRATEGY 1, 4 (2013).

in nature if wrongfully used for practices such as targeted advertising⁵ and influencing⁶ voter choices⁷. Therefore, allowing a virtually free license to data fiduciaries to process such information could lead to disastrous results. There is a need to fundamentally re-think approaches to business conduct and regulation in light of recent developments in such legislation as well as technological innovation.

Walking the tight rope - Allowing Commercial Freedom whilst Preventing the Weaponisation of Data

A.I. presents unprecedented challenges, particularly because of the speed and magnitude of its processes and the inherent ambiguity over its functioning (the black box problem)⁸. A.I. presents exciting opportunities to bring social change and assist businesses with greater productivity and innovation. At the same time, such emerging technologies pose significant threats to humanity should they be misused.

In the United States, the Supreme Court of Wisconsin's decision in *State v. Loomis*⁹ effectively legitimised the use of algorithmic risk assessment in sentencing when considering whether such use violated due process rights of the accused. This decision came despite the existence of the fact that neither the court nor the defendant was privy to the inner workings of the technology. The methodology behind the COMPAS system (a part of the algorithmic risk assessment technology) was not made known to the court by virtue of the fact that it was a protected trade secret.¹⁰ Apart from this concern, there were legitimate concerns surrounding the ability of judges to accurately understand the workings of such algorithmic risk assessments.¹¹ Despite having been a discretionary tool to assist the judiciary

⁵ Safiullah, M., Pathak, P., & Singh, S. (2016). Emergence of social media and its implications for public policy: A study of Delhi assembly election 2013. *Management Insight*, 12(1), 1-6.

⁶ Parveen, N., & Safiullah, M. (2021). Twitter and radio indicators of election outcomes: a study of Indian elections. *International Journal of Economics and Business Research*, 22(2-3), 278-289.

⁷ Safiullah, M. (2019). Prime time news coverage and electoral harvest-a study of 2014 Indian general election. *International Journal of Business Forecasting and Marketing Intelligence*, 5(4), 424-432.

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⁹ Safiullah, M., & Parveen, N. (2022). Big data, artificial intelligence and machine learning: a paradigm shift in election campaigns. *The new advanced society: Artificial intelligence and industrial internet of things paradigm*, 247-261..

¹⁰ *State v. Loomis* 881 N.W.2d 749 (Wis. 2016).

¹¹ Loomis, 881 N.W.2d at 761.

¹¹ *State v. Loomis*, 130 HARV. L. REV., 1530, 1533 (2017).

in deciding sentences, reliance on a system characterised by such opacity is a dangerous threat to unbiased decision-making. Therefore, a cautionary and comprehensive approach to regulation is advisable.

A Risk-based v. Use-case approach to taming Automation - a Proposed Structure for the Digital India Act

The proliferation of Generative A.I. has led to a variety of legal issues inter alia, the problem of large-scale copyright violations by Generative A.I. systems that scrape the internet to train themselves to provide appropriate output.¹² Amongst various examples, X was recently reprimanded for having utilised user data for training its Grok A.I. X presented its users with the option to opt-out of such data processing instead of adopting an explicit consent mechanism.¹³

Recently, the chip making giant NVIDIA was found to have scraped the internet for videos to train its A.I. – including videos from websites such as YouTube and content from Netflix.¹⁴ One of the more notable cases concerns the alleged copying of images from Getty for the training of A.I. by StabilityAI.¹⁵ StabilityAI admitted to using images from Getty to train its diffusion models by creating temporary copies of the processed images.¹⁶ Despite these instances proving to be a cause for concern, it comes as no surprise that original content from natural persons serves to ensure that A.I. is trained to provide accurate and updated results with changing times. Restricting A.I. systems to training on data that is in the public domain and data previously produced by it would very easily hamper the quality of output.¹⁷

¹² FEDERATION OF EUROPEAN SCREEN DIRECTORS, https://screendirectors.eu/__trashed-2/ (last visited Aug. 11, 2024).

¹³ Vish Gain, *Grok AI Is Training on User Data by Default – Here's How to Stop It*, SILICON REPUBLIC (Aug. 10, 2024, 9:29 PM), <https://www.siliconrepublic.com/business/grok-ai-training-x-twitter-default-user-data-privacy-turn-off>.

¹⁴ CNBCTV18, <https://www.cnbcnctv18.com/technology/ai-maker-nvidia-scraping-videos-from-youtube-netflix-companies-share-concerns-19455395.htm> (last visited Aug. 10, 2024).

¹⁵ Getty Images (US), Inc. v. Stability AI, Inc., 1:23-cv-00135, (D. Del.)

¹⁶ GILBERT+TOBIN, <https://www.gtlaw.com.au/knowledge/getty-images-vs-stability-ai> (last visited Aug. 11, 2024).

¹⁷ Sina Aleomohammad, Josue Casco-Rodriguez, Lorenzo Luzi, Ahmed Imtiaz Humayun, Hossein Babaei, Daniel LeJeune, Ali Siahkoohi, and Richard G. Baraniuk, *Self-Consuming Generative Models Go MAD*, <https://arxiv.org/pdf/2307.01850.pdf>.

Apart from the use of material protected by copyright for training, the manner of programming code into algorithms could create various biases¹⁸ that could seriously impinge upon constitutionally protected fundamental rights. For example, where the algorithm used is specifically fed data that concerns a particular racial or religious group, it could lead to biased results that could perpetuate social evils. This underscores the pressing need to regulate specific uses of emerging technologies.

The State of California recently tabled a bill titled “The Safe and Secure Innovation for Frontier Artificial Intelligence Models Act” (“SB 1047”)¹⁹ that seeks to effectively address the issue of A.I. regulation. The Bill has received considerable criticism²⁰ since it mandates that developers of A.I. provide information regarding all possible uses of their technology and imposes severe penalties in cases of misuse, even when such misuse is caused by third parties that may jailbreak the technology. It also mandates the inclusion of a ‘kill switch’ for such technology – allowing for destruction when found to have been misused. Its harsh and ambiguous terms risk discouraging innovation.

The Chief Justice of India (“CJI”) – Mr. D.Y. Chandrachud has supported the cause for increased A.I. usage to assist those involved in the legal profession. The CJI stated that “A.I. can handle routine tasks, freeing lawyers’ time for high-value work”²¹. However, it is pertinent to understand that it is rather impractical to arrive at an objective definition of what constitutes ‘routine work’. Normalising the use of A.I. in the legal field without proper risk categorisations and appropriate guidelines could lead to disastrous consequences. A certain American lawyer was recently put to task for having used made-up case law (generated by ChatGPT) during proceedings before

¹⁸ Shira Mitchell, Eric Potash, Solon Barocas, Alexander D'Amour, and Kristian Lum, *Algorithmic Fairness: Choices, Assumptions, and Definitions*, ANNUAL REVIEWS, (Aug. 11, 2024, 10:12 A.M), <https://www.annualreviews.org/content/journals/10.1146/annurev-statistics-042720-125902>.

¹⁹ 2023 CA SB1047 Safe and Secure Innovation for Frontier Artificial Intelligence Models Act.

²⁰ ADVOCACY.CALCHAMBER, <https://advocacy.calchamber.com/2024/08/07/godmother-of-ai-warns-sb-1047-ai-bill-restricts-innovation/> (last visited Aug. 11, 2024).

²¹ Aiman J. Chishti, *Artificial Intelligence Can Handle Routine Tasks, Freeing Lawyers’ Time For High-Value Work: CJI DY Chandrachud*, LIVELAW (Aug. 10, 2024, 4:24 P.M.), <https://www.livelaw.in/top-stories/supreme-court-chief-justice-dy-chandrachud-artificial-intelligence-artificial-intelligence-will-augment-efficiency-without-impacting-foundational-skills-of-legal-profession-266363#:~:text=more%20content%20at-,Chief%20Justice%20of%20India%20DY%20Chandrachud%20emphasized%20that%20Artificial%20Intelligence,they%20would%20similarly%20embrace%20AI.>

the court²². New technologies haven't always been smoothly integrated into the legal field - the case of "*Buck v. Bell*" explains how a morally reprehensible "eugenical sterilisation act" was upheld by the judiciary²³. Law is a profession characterised by attention to detail and professionalism. It may be rather risky to adopt a one-dimensional approach to regulation in India. Therefore, it is wise to adopt a combination of a risk-based and use-case approach. Certain A.I. technologies must be categorised as high risk - such as facial recognition technology used to profile candidates. Inspiration may be drawn from annex III of the EU A.I. Act²⁴ – which provides a descriptive list of high-risk A.I. technology. Other A.I. technology whose risks are dependent on potential usage may be appropriately graded upon a comprehensive deliberation by a proposed A.I. professional agency.

A crucial aspect to the act is the introduction of a dedicated supervisory body for the purpose of A.I. regulation. Rather than risking creating an extension of government censorship through the establishment of an entirely government run body, a special A.I. professional agency must be created with expert members skilled in A.I. development (these may include the owners of A.I. start-ups themselves), a system of A.I. auditors²⁵, and a few government representatives from "The Ministry of Skill Development and Entrepreneurship". A largely self-regulatory mechanism that serves to incorporate suggestions from those who are to be principally affected by regulation would serve the best interests of all stakeholders involved. An ex-ante framework of risk classifications may be advisable and practical. However, it is pertinent to acknowledge that A.I. businesses would be unwilling to divulge complete details about the functioning of their technologies lest they lose out on their trade secrets and other intellectual property.²⁶ Therefore, an ex-ante legal framework to risk mitigation hinged on full disclosures of material workings (the exact mechanism of the working of such technology) of A.I. technology that imposes penalties for non-compliance for full disclosures is impractical. A system of approvals based on full disclosures for each use of A.I. technology would amount to the death knell of A.I. start-ups in India.

A middle path to regulation is advisable. Developers of A.I. technology must be encouraged to clearly demarcate and disclose their A.I.'s known and

²² Benjamin Weiser & Nate Schweber, *The ChatGPT Lawyer Explains Himself*, THE NEW YORK TIMES, (Jun. 8, 2023), <https://www.nytimes.com/2023/06/08/nyregion/lawyer-chatgpt-sanctions.html>.

²³ *Buck v. Bell*, 274 U.S. 200, 207 (1927).

²⁴ TRAIL, <https://www.trail-ml.com/blog/eu-ai-act-how-risk-is-classified> (last visited Aug 11, 2024).

²⁵ JACOB TURNER, ROBOT RULES 310(Palgrave Macmillan 2019).

²⁶ *State v. Loomis* 881 N.W.2d 749 (2016).

predicted uses and limitations to the A.I. professional agency. Whilst larger companies (on the basis of objective criteria arrived at by the legislature) may be legally mandated to provide information on model cards (containing information on the foundation of the model, type of model(open/closed), model architecture, how the model was trained, and its known uses), start-ups that do not meet a certain size requirement may be encouraged (instead of being legally mandated) to provide such information. This would allow small tech-based start-ups the freedom to develop technologies without being subjected to excessive compliance requirements. The Digital India Act may provide for trust ratings (by the A.I. professional agency) of such start-ups on the submission of such model cards. These ratings when made publicly available, and coupled with proactive public awareness building exercises on the uses and dangers of A.I. technology could promote a healthy environment of self-regulation for upcoming start-ups that does not directly coerce compliance with the threat of criminal punishment.

Whilst there exists a cause for the protection of work influenced by personalised prompts by natural persons (recently, the Beijing Internet Court ruled that a copyright in an AI-generated image belonged to the user because the user changed the prompts and settings to suit his aesthetic preferences and judgement²⁷⁾), information regarding prompts used could alternatively be required to be submitted by the proprietor should there be a charge against such proprietor for copyright violation.

A professional body characterised by active surveillance, effective skill upgradation, and an effective dispute resolution mechanism would ensure a system of checks and balances on A.I. development. A.I. auditing could likely become a profession such as Chartered Accountancy. The establishment of a professional body with specified rules of membership, guidelines for conduct, and skill training and certificate courses on A.I. examination could become a reality in the near future.

Suggestions and The Way Forward

Sub-categorising Personal Data into Sensitive and Other Personal Data and ensuring differential treatment of the two

Regulation (EU) 2016/679 of the European Parliament explains that “*Personal data which are, by their nature, particularly sensitive in relation to fundamental rights and freedoms merit specific protection as the context*

²⁷ *Generative AI Navigating Intellectual Property, IP AND FRONTIER TECHNOLOGIES*, https://www.wipo.int/export/sites/www/about-ip/en/frontier_technologies/pdf/generative-ai-factsheet.pdf.

of their processing could create significant risks to fundamental rights and freedoms.”²⁸ This highlights the need to carve out a separate definition of ‘sensitive personal data’ within the DPDPA. Additionally, it is advisable that guidelines be implemented that impose strict opt-in only measures for utilisation of sensitive data for objectives such as Generative AI. training. Additionally, publishers of other publicly available data must be incentivised to license their content to companies in need of data for A.I. development. Amending Section 7 of the DPDPA²⁹ to allow for opt-out mechanisms with the requirement of advance notices to use other personal data for legitimate entrepreneurial activities could go a long way in serving to strike the requisite balance between ensuring consumer privacy and commercial freedom. This would lead to increased tax revenues, job growth, and investment opportunities. Additionally, it would also encourage effective training of Generative A.I. systems that could provide large-scale social benefits, particularly in the long run.

Making an amendment to the DPDPA to prevent the processing of personal data under a veil of ambiguity

Section 11 of the DPDPA allows a data principal to obtain information regarding the processing of their information by a data fiduciary. There is a need for an amendment to S.11 to remove the word ‘summary’ since this allows data fiduciaries a great deal of room to process information under a veil of ambiguity. In “**FF v. Österreichische Datenschutzbehörde**”³⁰, the CJEU explained that “*the first sentence of Article 15(3) of Regulation (EU) 2016/679 must be interpreted as meaning that the right to obtain from the controller a copy of the personal data undergoing processing means that the data subject must be given a faithful and intelligible reproduction of all those data.*” The court clarified that individuals have the right to request and receive copies of specific parts or the entirety of documents or databases that contain their personal information, so long as it doesn’t infringe on the rights and freedoms of others. As a step towards ensuring that individuals fully exercise their data protection rights, a re-wording of the section to incorporate the above understanding is advisable.

Impose Restrictions on the Medium of Collection of Data

Additionally, the legislature must not only focus on consent mechanisms for data collection but also impose restrictions on media through which such

²⁸ Regulation (Eu) 2016/679 of the European Parliament and of the Council of 27 April 2016.

²⁹ The Digital Personal Data Protection Act, 2023, § 7, No. 22, Acts of Parliament, 2023 (India).

³⁰ Case C-487/21 - FF v. Österreichische Datenschutzbehörde.

data can be collected. For example, an employee of a travel tourism company should not be allowed to collect customers' personal documents such as his/her Aadhaar Card or Bank Statement through their personal messaging applications or email IDs. Instead, this information must only be dealt with by the employee when collected through a specified medium that ensures accountability and promised erasure after serving the purpose for which it was obtained (i.e., it must comply with the principle of purpose limitation³¹).

Invest in Public Private Partnerships to ensure awareness on A.I., skill development, and A.I. infrastructure development

The state of California recently entered into a partnership with NVIDIA to ensure A.I. skill training for students, the establishment of new curriculums, and the establishment of A.I. laboratories and dedicated workshops for training.³² India has previously played catch-up with revolutionary technological changes (such as the introduction of computers and software). However, in an environment characterised by unprecedented dynamism and the will to improve business readiness, it is pertinent to ensure that the government and private players in India come together to develop not only A.I. technologies but also a skilled A.I. workforce that can effectively add to the skill capital of the country and handle emerging technologies.

Investing in alternative technological counter-measures to combat the excesses of A.I. use

It is advisable that the government invests in and encourages private investment in alternative counter-measures – such as increased private-public partnerships in developing technologies such as the Glaze software (a software developed by the University of Chicago that makes certain minute alterations to artwork that are imperceptible to the average human eye but serve to prevent A.I. systems from copying an author's unique style in its output).³³

³¹ Max von Grafenstein, *Regulation as a Facilitator of Startup Innovation: The Purpose Limitation Principle and Data Privacy* RESEARCHGATE (Aug. 11, 2024, 9:29 PM), https://www.researchgate.net/publication/323328223_Regulation_as_a_Facilitator_of_Startup_Innovation_The_Purpose_Limitation_Principle_and_Data_Privacy.

³² Sarah Parvini, California partners with Nvidia to bring artificial intelligence resources to colleges, THEGLOBEANDMAIL (Aug 9, 2024, 1:20 PM), <https://www.theglobeandmail.com/investing/markets/indices/IUXX/pressreleases/27941745/california-partners-with-nvidia-to-bring-artificial-intelligence-resources-to-colleges/>.

³³ AIMEE COZZA, <https://www.aimeecozza.com/what-is-glaze-and-how-can-it-help-protect-against-ai-scraping/> (last visited Aug. 11, 2024).

Conclusion

A.I. and data privacy concerns are at the forefront of regulators' considerations for lawmaking. Undoubtedly, emerging technologies provide for exciting new opportunities that have already started to revolutionise the manner in which people live their lives and the functioning of businesses. A cautionary approach to regulation focused on transparency and accountability is advisable. The establishment of a professional A.I. agency with an emphasis of self-regulation and encouragement of full disclosures regarding A.I. use is more conducive to the sustained use of A.I. technology by emerging start-ups when compared to a coercive approach with criminal penalties for breaches. The sub-categorisation of personal data into sensitive and other personal data, and differential treatment of regulation of their respective uses is a practical and necessary step to striking the right balance between allowing commercial freedom and protecting consumer privacy.

4

Empowering Innovation's Success: A Blueprint for India's Start-Up Policy'

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Abstract: On the 23rd day of July 2024, the Hon'ble Finance Minister, while presenting the Union Budget 2024-25 announced to abolish the 'angel tax' for all investors in startups. Similarly, since 2016, there have been various regulatory reforms to streamline business operations, ease of doing business, simplify capital acquisition, and reduce compliance burdens for startups, enhancing the overall ecosystem and facilitating growth.

There are various eligibility criteria for registering as a startup, like that startups must register as private companies, partnerships, or LLPs, have under INR 100 crore turnover, operate for 10 years, focus on innovation, and obtain certification. Reconstructed firms are excluded. All the while the increasing dependence on technology in the post-modern era, startups have become more than simply a business in the lives of people, most importantly youngsters; it's their unleashed dream of the Viksit Bharat 2047. Moreover, as per Hurun Research Institute, India is now ranked as the third nation in the world with the greatest number of unicorns, after China (661) and the United States (362). In India, startups typically take eight years to succeed. With 115 unicorn businesses and 117,254 DPIIT-registered startups, India is home to a thriving startup community valued at over \$350 billion. However, this list doesn't mention the details of failed startups and their reasons for the same. The harsh reality is most businesses depend on investment from within the first two years of their existence, like family members and friends. By the time they are six years old, they usually obtain the support of venture capitalists. The setting up of startups becomes hard for this first main reason. Secondly, there is void or misled guidance in society in relation to this, like we have coaching

institutes for various exams, we don't have it for startups, and we neither have a proper start-up policy nor a proper start-up policy that could guide businesses to get ahead with business and form start-ups and unicorns. Startups are a heavily inclusive venture that is opted for even by those with no business experience.

This paper seeks to suggest a blueprint for the startup law, dealing with the Nascent Business stage, pre-startup Novice stage, and Unicorn stage, including guidance, guidelines, compliance, and feedback, which shall promote inclusive growth for the Indian economy and India's goal of becoming No. 1 in Unicorns too.

Keywords: Startup Law, Start-up Policy, IPR, Tax.

Introduction

"Startups are the engine of innovation and growth for a nation and its economy; entrepreneurs are the engineers."

The world of entrepreneurship has people with different aspirations. There are some entrepreneurs who are business owners, i.e., they want to contribute to the economic growth of the business and the country; they want to import, export, grow, etc. But we also have lifestyle entrepreneurs who just want to stay in the corner of the market and thrive for happiness or for serving others.¹ Ideas can come from anywhere, but legal knowledge is not what everyone holds. Every idea has some potential, and that's what the 'make in India' scheme wanted to promote. As legislators, we must simplify the startup setup processes.

Startups are sine qua non for excelling in innovation, job creation, and facilitating economic growth for a populated nation like India. Israel got independence in 1948, pretty close to India's independence, and its startups have been the building blocks of the modern Jewish state, with the highest density of startups and venture capital. Israeli startups have driven innovation in various technology sectors, including telecommunications (Amdocs and Comverse), contact centers (Verint and NICE), IT management (Mercury), security (Check Point), semiconductors (DSPG), and infiniband (Mellanox).² But it was only after 2018 that India started to propel itself, with 2-3 startups born every day. What was so special about Israel? It is time to learn from countries like these and make a startup law or policy that will aid investors and small- scale business starters in easily following the laws.

¹ Hessels, J., van Gelderen, M. and Thurik, R., *Entrepreneurial aspirations, motivations, and their drivers*, 31(3) Small Business Economics, 323–339 (2008).

² Bana, Sarosh, *Shalom, Modi!* Begin-Sadat Center for Strategic Studies (2017).

The scope of this paper is to delve into the basic aspects of a startup and discuss the laws that should be made applicable to them. Basic legal planning at all stages is necessary to avoid paying lakhs to a commercial litigation lawyer like us. As the famous saying goes, failure to plan is planning to fail.

Awareness: Unveiling the Reality of Startups

Startups are different from small businesses. There are different stages of development for a startup to become Unicorn.³

However, the success rate always forms the lesser part of the ratio because of various reasons depending upon field to field and intricacies to intricacies. It does not totally mean we're discouraging entrepreneurs not to enter the magical arena of the start-up world, rather we here by virtue of this startup policy, would ease the startup proceeding process, tackling all these issues and "dealing with the *unknown and knowns* - start-up Policy"

Incorporation and Registration Requirements

Under the Companies Act, 2013, various types of companies can be established^{4a,b}. Some of them are LLPs, OPCs, public companies, private companies, etc. We generally do not expect a layman to know the benefits and drawbacks of registering as a certain type of company. Thus, flexibility in changing from one type of company to another should be allowed so that they can change as per the changing requirements or according to the venture capital received. It is easier to customize existing documents than to create new ones every time. Hence, under the new startup laws, the government can create a sample Memorandum of Association that will act as a base. Evidence of such samples provided by the government, such as the standing order prescribed by the government, exists.⁵

There are many open access sources of forms available in the marketplace brought into circulation by various law firms. People who wish to save money

³ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

^{4a} Safiullah, M., Iqbal, M. I., & Parveen, N. (2024). Challenges and opportunities within the evolving CSR landscape in India. *Technology-Driven Evolution of the Corporate Social Responsibility Ecosystem*, 46-60.

^{4b} Safiullah, M., Anchal, & Parveen, N. (2024). Brand Building Through CSR Initiatives During Hajj and Umrah: A Study of Tourism Industry. In *Corporate Social Responsibility, Corporate Governance and Business Ethics in Tourism Management: A Business Strategy for Sustainable Organizational Performance* (pp. 85-92). Emerald Publishing Limited.

⁵ Industrial Employment (Standing Orders) Act, 1946, § 2(g), No. 20, Acts of Parliament, 1946 (India).

generally think they're smart enough to just change a few things in those available documents and think they did a great job. They must be stopped from following such practices, and it should be the government's initiative to engage highly experienced lawyers who would post high-quality documents that have been vetted by them. Israel has set up a standard form contract court, which would be very helpful in expediting the disputes that may arise out of the use of standard form contracts by entrepreneurs. First and foremost, we would be coming up with a policy called "Start-up Policy 2024" which would be implementable in the entire set of states, and UTs in India.⁶

The initial chapter consists of the incorporation and registration requirements, as follows:

- 2.1 A startup may be registered under the Startup Act of 2024.
- 2.2 The registration would require the MoA, pre-existing businesses, experience, if any, tax records, Identification, name clause, situation clause, Situation clause, Object clause, liability clause, and capital clause.⁷
- 2.3 Article of Association, Share Capital, Shareholder Rights and Responsibilities, Management Structure, Decision-Making Processes, Transfer of Shares, Dividend Distribution, and Auditor Provisions.
- 2.4 Goods and Services Taxpayer Identification Number (GSTIN) Employee Offer Letter, Incorporation Documents for Foreign Nationals, Privacy Policy, and Terms of Use Director Identification Number, Shareholder Agreement, Certificate of Incorporation, Trademark Registration, No Objection Certificate, Start-up Pan Card, Tax Identification Number, Non-Disclosure Agreement (NDA).
- 2.5 Any other if required for that instance.

Growth, facilitation, and security- Data privacy, cybersecurity in security section

- In order to foster a conducive atmosphere for the growth of startups, TreadBinary emphasized the significance of privacy and data security, as well as laws, and asked the incoming administration to prioritize these areas. Firstly, adherence to the four golden rules of startups is a sine qua non for relentless growth and overall development, i.e., *Rule #1: Seek out the best, not the cheapest*
Rule #2: Revenue is your first priority
Rule #3: Learn how to make effective collaborative decisions

⁶ States' & UTs' Startup Policies, <https://www.startupindia.gov.in/content/sih/en/state-startup-policies.html> last visited August 4, 2024).

⁷ *Supra* note 35

Rule #4: Everything else is dependent⁸

"We expect the government to take a proactive approach to enhancing India's startup ecosystem," stated Darshil Shah, the founder and director of TreadBinary. As an interim measure until a comprehensive Digital India Act is produced, regulations for the Digital Personal Data Protection Act (DPDPA) and amendments to the IT laws addressing important concerns like AI-driven misinformation and deep fakes are prioritized along with privacy and data security.⁹

Apart from that, rules regarding this should also be embedded in the startup laws with grave penalties, because these are what kill startups. The blueprint could include a section dedicated to user consent and transparency where it is stipulated that a clear, concise, and easily understandable privacy policy must be displayed first on their website, as multiple startups start in the form of e-commerce.¹⁰ It should also include a pledge against misuse of the collected data. Startups have seventy-two hours to alert the central authorities and impacted parties in the case of a data breach, with an implied obligation to provide assistance to people impacted by data breaches.¹¹

Taxation and Financial Regulations

The taxation regime policy of startups holds the most important arena of start-up development¹², while the union budget 2024-25 announced the abolition of the 'angel tax' for all investors in startups.¹³ Section 80¹⁴ of the Income Tax Act deals with the exempting taxes of startups too, adding on for

⁸ *Id.*

⁹ D'Cruze D, *Startups in India Outline Their Expectations from the New Government* BUSINESS TODAY, (Aug. 3, 2024, 9:47 AM), <https://www.businesstoday.in/technology/news/story/startups-in-india-outline-their-expectations-from-the-new-government-431978-2024-06-03>

¹⁰ Gupta A, *Legal And Ethical Issues Faced By The Start-Ups In India* TRADEMARK - INTELLECTUAL PROPERTY - INDIA, (Aug. 5, 2024, 11:30 PM), <https://www.mondaq.com/india/trademark/1042036/legal-and-ethical-issues-faced-by-the-start-ups-in-india>.

¹¹ Debarun Mukherjee, Ushering the Startup-Revolution, the Indian way: Identifying Impediments and Overcoming obstacles, 3.1 JCLJ 747(2022)

¹² Startup Recognition & Tax Exemption, https://www.startupindia.gov.in/content/sih/en/startupgov/startup_recognition_page.html#:~:text=Startup%20India%3A%2080%20IAC%20Tax,first%20ten%20years%20since%20incorporation (last visited August 6, 2024)

¹³ Gupta A, *Union Budget 2024-25: Govt Abolishes Angel Tax on Startup Funding*, BUSINESS-STANDARD, (Aug. 5, 2024, 11:40 PM), https://www.business-standard.com/budget/news/budget-2024-abolishes-angel-tax-on-startups-for-all-classes-of-investors-124072300667_1.html.

¹⁴ Income Tax Act, 1961, § 80, No. 58, Acts of Parliament, 1961 (India).

the consecutive three years of incorporation. A company may apply for the same from the government's website. However, the said act and the different acts deal with it. Here, we propose taxation and financial regulation in 4.0.

It comprises:

- 4.1 Dividing the startup into three segments: the novice stage, the experienced stage, and the default stage.
The government divides the exemption percentage as per segments and categories of startups. Eg- IT, Tech, Pharma, Farming, for the first three years, and taking the tax money after three years once the start-up flourishes as the government has limited public money.
- 4.2 Reducing the tax exemption for startups with high-risk stages to 10% after applying on the DPIIT website.
- 4.3 To avail of these benefits, the company or start-up has to have:
 - i) A decent and no default tax record from the tax identification number.
 - ii) Quarterly facilitation with income tax officials in regards to the profit made out of the service since incorporation until it exists.
 - iii) GST is already there to avoid double taxation.
- 4.4 Smooth implementation of Angel Tax abolition under Section 56(2) (viib)¹⁵ of the Income Tax Act for effective growth¹⁶
- 4.5 Budget, expense reporting, and audits to be made with the help of government officials.
- 4.6 1% of the 2% funds by big businesses as a form of corporate social responsibility¹⁷ would be included in startups under Section 135¹⁸ of the Income Tax Act.¹⁹
- 4.7 The company's losses will be used as an asset by shareholders in voluntary liquidations.

¹⁵ *Id.* at § 56(2)(viib).

¹⁶ Chokhawala MS, *Angel Tax: Exemption, Rate, Example*, CLEARTAX, (Aug. 2, 2024, 7:06 PM), <https://cleartax.in/s/angel-tax#:~:text=Angel%20tax%20is%20a%20tax,maximum%20paid%2Dup%20capital%20restrictions>.

¹⁷ Tim Stobierski, *What Is Corporate Social Responsibility? 4 Types*, BUSINESS INSIGHTS BLOG, (Aug. 2, 2024, 8:02 PM), <https://online.hbs.edu/blog/post/types-of-corporate-social-responsibility>.

¹⁸ Safiullah, M., Iqbal, M. I., & Parveen, N. (2024). *Challenges and opportunities within the evolving CSR landscape in India. Technology-Driven Evolution of the Corporate Social Responsibility Ecosystem*, 46-60..

¹⁹ Mayashree Acharya, *Corporate Social Responsibility Under Section 135 of Companies Act 2013*, CLEARTAX, (Aug. 2, 2024, 9:10 PM), <https://cleartax.in/s/corporate-social-responsibility#:~:text=The%20Companies%20Act%2C%202013%20provides,preceding%20three%20years%20as%20CSR>.

4.8 Tax insolvency procedures are dealt with in Policy Point

Intellectual Property Rights: Trademark, Copyright, Technology

The policy would be incomplete without the inclusion of protection for the heart and soul of a startup. It doesn't take a lot of money or a team of lawyers to obtain fundamental intellectual property protection; only basic legal research costs are required. It could include necessitating a co-founders agreement because not always is an idea conceived jointly. Guidance on how to get a non-disclosure agreement is a basic help.

To encourage new and creative work from startups, we can devise fee reductions. Not denying that individual filing of copyright is not a huge amount of money, but we see a lack of reduction in the official fee for bulk filing when the company is a startup, as the amount may sometimes get huge as it adds up. This privilege is available in trademark and patent laws where an 80% rebate is provided.²⁰

Incorporating the haphazard and variously spread-out laws is also one of the objectives; therefore, the contents of IPR facilitation for startups could be referred to during policy making.²¹ Also, initiatives like SIPP²² should be merged under the heading. Trade secret misuse is defined broadly by policy as a facilitator²³. WIPO (World Intellectual Property Organization) and TRIPS (Trade Related Aspects of Intellectual Property Rights) agreements are there for it, and the laws of India.

For copyright, there is a lack of a reduction in the official fee for start-ups under copyright laws. The same is available in trademark and patent laws but is missing in copyright law. The official fee is obviously less, but when a start-up wants to file a huge number of them, there is a huge fee attached to them as the amount adds up. Maybe reductions can be availed for bulk filings of start-ups in copyrights. Trademark^{24, 25} and patents have this.²⁶ The Designs

²⁰ IPR FACILITATION FOR START-UPS, https://ipindia.gov.in/writereaddata/images/pdf/startups_IPRFacilitation_22April2016.pdf (last visited August 10, 2024).

²¹ *Id.*

²² Acharya M, *Start-Ups Intellectual Property Protection (SIPP)*, CLEARTAX (Aug. 9, 2024, 9:40 PM), <https://cleartax.in/s/start-ups-intellectual-property-protection-sipp>.

²³ INTELLECTUAL PROPERTY RIGHTS (STARTUP INDIA), <https://www.startupindia.gov.in/content/sih/en/intellectual-property-rights.html> (last visited August 9, 2024).

²⁴ *Id.*

²⁵ Mayashree Acharya, *Trademark Registration Online Process & Procedure for Brands in India*, CLEARTAX, (Aug. 9, 2024, 10:24 PM), <https://cleartax.in/s/trademark-registration-procedure-india#:~:text=Trademark%20recognition%3A%20Trademark%20registered%20in,trademark%20can%20be%20further%20renewed>.

²⁶ FREQUENTLY ASKED QUESTIONS, <https://www.ipindia.gov.in/writereaddata/Portal/>

Act of 2000²⁷ and the related Designs Rules of 2001²⁸ oversee the registration and safeguarding of industrial designs in India. Granted, the initial term of three years could be extended to 15 as per the requirement²⁹. Although startups might rarely deal with this aspect of IPR, the remedy is still there.

Insured Insolvent and Bankrupt Start-ups

Sometimes entrepreneurs need to make the hard call and shut down the business. The first and foremost step the government should take is to fast-track the applications so that the value of the debt does not increase.

Startups that have straightforward debt structures or that satisfy certain requirements may be wound up during insolvency or bankruptcy within ninety days of submitting an application to be wound up quickly. In such cases, the startup will be assigned an insolvency expert who will oversee the company's liquidation of its assets and payment of its creditors within six months of the appointment (the promoters and management will no longer be involved in day-to-day operations). Following the appointment of the insolvency specialist, the liquidator will oversee the quick winding down of the company, the sale of assets, and the payment of creditors in compliance with the Insolvency and Bankruptcy Code's distribution cascade. This guidance from the government's side will help them have the idea in the back of their minds that they can rely on someone and will encourage them to survive till their last breath.³⁰

Innovative startups could be defined as those that showcase criteria like: i. expenditure of at least 1% on R&D out of the annual costs or its turnover (the largest value being considered); ii. employing highly skilled workers (at least two-thirds Master's graduates, or at least one-third PhD holders, students, or researchers); iii. being the proprietor of registered software or the owner, depositary, or licensee of a registered patent. If innovative startups experience consistent losses, they could

Images/pdf/Final_FREQUENTLY_ASKED_QUESTIONS_-PATENT.pdf (last visited August 10, 2024).

²⁷ DESIGNS | INTELLECTUAL PROPERTY INDIA, <https://ipindia.gov.in/designs.htm#:~:text=The%20registration%20and%20protection%20of,the%20earlier%20Act%20of%201911> (last visited August 10, 2024).

²⁸ *An Overview of Design Protection*, EXCELON IP, (Aug. 10, 2024, 9:25 AM), <https://excelonip.com/an-overview-of-design-protection/>.

²⁹ Konpal Rae & Sunil Tyagi, *Design Protection in India*, LAKSHMIKUMARAN & SRIDHARAN ATTORNEYS, (Aug. 10, 2024, 9:39 AM), <https://www.lakshmisri.com/newsroom/archives/design-protection-in-india/> .

³⁰ STARTUP INDIA: ACTION PLAN (2016), <<https://www.startupindia.gov.in/content/dam/invest-india/Templates/public/Action%20Plan.pdf>> (last visited August 10, 2024).

be eligible for a one-year grace period that covers losses exceeding one-third of the share capital (with terms delayed by two fiscal years).³¹ The ultimate objective fulfilled by the proposed actions is that if you're failing, fail fast.

Others

What is the commonality between human growth hormone, modern magnetic resonance imaging machines, and nicotine patches? These products all originated from technologies developed on US university campuses, which had me wondering about the important role law schools could play in helping Indian startups grow.³² Legal aid cells are a compulsory organ of any law school, and it signifies how it is incorporating corporate social responsibility into itself and giving effect to the basic rights mandated in the Indian Constitution. Similarly, entrepreneurship incubation cells can be instituted in all the National Law Universities to begin with. Universities like Chanakya National Law University have already taken the first steps.³³ Incorporating a mandate into the law would provide the necessary legal fillip that startups need to set themselves up or during any stage of their business cycle.

Universities' innovation funds and incubators frequently offer young researchers and students the initial assistance they need to create a company idea. Later, entrepreneurs seeking more specialized approaches will find sector-specific incubators and accelerators interesting. In these Startup India cases, network introductions, and business advice are typically more tailored to the needs of entrepreneurs.³⁴ Therefore, assigning at least one incubator or

³¹ THE ITALIAN STARTUP ACT, https://www.mimit.gov.it/images/stories/documenti/Slides%20innovative%20startups%20and%20SMEs%2007_2019.pdf (last visited August 8, 2024).

³² Nandagopal, Magesh. *Commercializing Technologies from Universities and Research Institutes in India: Some Insights from the US Experience*, 104 CURRENT SCIENCE 2, pp. 183–89 (2013).

³³ CENTRE FOR INNOVATION, INCUBATION AND LEGAL ENTREPRENEURSHIP (CIILE) - CHANAKYA NATIONAL LAW UNIVERSITY, <https://cnlu.ac.in/centre-for-innovation-incubation-and-legal-entrepreneurship-ciile/> (last visited August 10, 2024).

³⁴ THE ROLE OF INCUBATORS AND ACCELERATORS IN KNOWLEDGE VALORISATION (*Research and Innovation*), [https://research-and-innovation.ec.europa.eu/research-area/industrial-research-and-innovation/eu-valorisation-policy/knowledge-valorisation-platform/thematic-focus/role-incubators-and-accelerators-knowledge-valorisation_en#:~:text=Incubators%20and%20accelerators%20provide%20support%20and%20training%20on%20entrepreneurial%20skills,'demo%2Ddays'\).](https://research-and-innovation.ec.europa.eu/research-area/industrial-research-and-innovation/eu-valorisation-policy/knowledge-valorisation-platform/thematic-focus/role-incubators-and-accelerators-knowledge-valorisation_en#:~:text=Incubators%20and%20accelerators%20provide%20support%20and%20training%20on%20entrepreneurial%20skills,'demo%2Ddays').) (last visited August 6, 2024).

accelerator interested in the idea can help them get resources, connections, and input to refine their business model.

Case Studies

- **Africa**

When crafting Startup Acts, legislators ought to give particular consideration to the significance of implementing an ecosystem approach and a participatory method as a precise and impartial method of choosing recipients. Aside from Senegal and Tunisia, which each passed a Startup Act in 2018, by 2019, at least sixteen additional African nations are in the midst of adopting one³⁵

- **Nepal**

(Nepal Startups Policy, 2080). The government is putting institutional, legal, and infrastructure frameworks in place with the goal of creating a favourable ecosystem. This includes creating new laws and regulations pertaining to the industry, updating those that already exist, and making it easier for people to access resources such as instructors, company incubation centres, accelerator programs, resource people, and capacity building initiatives. With legal changes to facilitate their entry into the capital market, it promotes investment by drawing in both domestic and foreign money, including foreign direct investments (FDIs) and investments from non-resident Nepalis (NRNs)³⁶.

- **Italy**

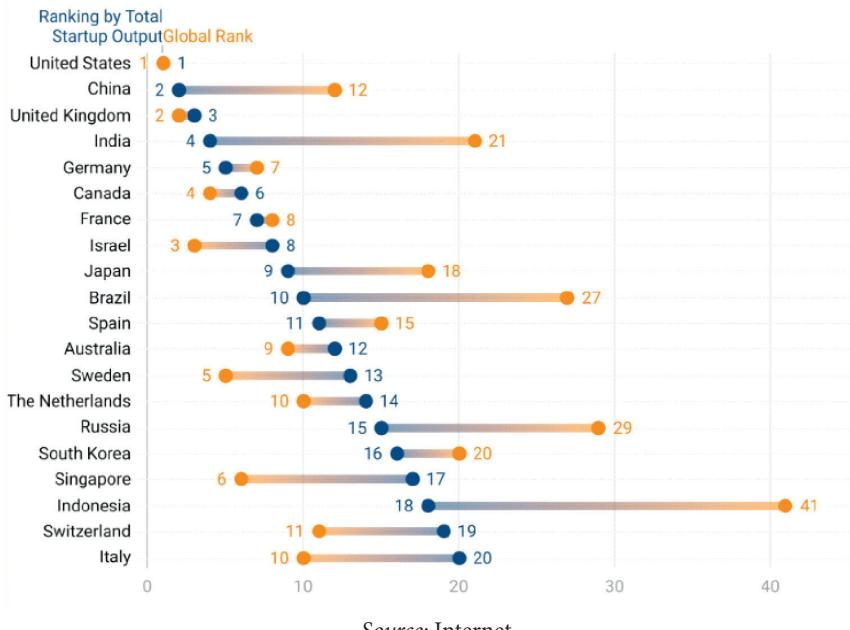
The startup policy of Italy makes it simpler for creative firms to incorporate, which facilitates the establishment of new companies. Tax breaks are provided to individuals who invest in startups in order to promote investment. In recognition of the particular requirements of start-up companies, the program also introduces flexible labour laws for startup workers. Public guarantees for bank loans are easier to get for startups, which strengthens their financial stability. Provisions for equity crowdfunding are included in the regulatory framework, creating additional channels for capital raising. In order to draw in international talent, non-EU enterprises can apply for special visa schemes. Lastly, the

³⁵ *Startup Acts in Africa: The State of Play*, ICR FACILITY, https://www.icr-facility.eu/wp-content/uploads/2023/08/icreport_startupacts.pdf (last visited August 11, 2024).

³⁶ *Nepal's Startup Policy: Where Do We Stand Globally?*, <https://nipore.org/nepals-startup-policy-where-do-we-stand-globally/> (last visited August 11, 2024)

strategy facilitates access to outside markets and internationalization, assisting Italian startups in growing their reach beyond borders³⁷

Microscopic Big Picture: India's Start-up 2047 vis-à-vis Suggestions



Source: Internet

The Viksit Bharat is the goal that has held the minds and hearts of all Indians, willing to make India developed by 2047. On the verge of unlocking India's potential as a manufacturing hub³⁸ Right now, we're one of the developing countries facing major challenges like poverty, unemployment, health issues due to unhygienic food and drinks, homelessness, and starvation death. Government is keen to align the Viksit Bharat with the Startup Scheme, as it has played a major role in more than a million job creations.³⁹ India, already the world's third-largest ecosystem in the startup world, aims to top the field by 2047. The angel tax is already on the verge of being deduced by

³⁷ MINISTRY OF ECONOMIC DEVELOPMENT, INNOVATIVE STARTUPS AND SMES, MIMIT, https://www.mimit.gov.it/images/stories/documenti/Slides%20innovative%20startups%20and%20SMEs%2007_2019.pdf (last visited August 9, 2024).

³⁸ Aditi Gupta, *Budget 2024: Unlocking India's Manufacturing Prowess Key to Viksit Bharat*, THE ECONOMIC TIMES, (Aug. 6, 2024, 7:49 PM), <https://economictimes.indiatimes.com/news/economy/policy/budget-2024-unlocking-indias-manufacturing-prowess-key-to-viksit-bharat/articleshow/111828062.cms>.

³⁹ Kumar D, *India's Startup Growth to Pave Way to Developed Nation by 2047: PM Modi*, MINT <https://www.livemint.com/news/india/indiastartup-growth-topave-way-to-developed-nation-by-2047-pm-modi-11710919187559.html> (last visited August 5, 2024).

this year's budget. The Hon'ble Prime Minister has also emphasized extending the start-up builders and not just beneficiaries to the non-metropolitan cities of the country. Another rampant way would be to give vocational training on different models of commercializing technologies⁴⁰ from schools and universities themselves.⁴¹

Goals

1. Facilitate full government support for the startups until the first 3 years of their incorporation, be it funds, infrastructure, or other related areas.
2. Give vocational training on different models of commercializing technologies from schools and universities themselves.
3. Establishing one incubation centre in each city, dispute resolution courts, start-up schools, and start-up officers to facilitate guidance; releasing loan funds by proper assessment by government officials and big entrepreneurs (e.g., Shark Tank).
4. Bridging the gap between the poor states and the solemnized states.
5. Environment conducive to the creation, growth, and enterprises.
6. Paying heed to legal and environmental hygiene foremost, to avoid future disputes.⁴²
7. The presence of multinationals, support services, and cultural aspects have to be kept in mind.

Conclusion: A Way Forward for India as a World Unicorn Centre

The workforce is becoming more and more literate and skilled, so the economy needs to find every means to employ them and help them support themselves.⁴³ A significant trend has surfaced in India's thriving startup scene, which is home to more than a hundred unicorn companies: Many of these companies are choosing to move their headquarters to countries with more benevolent tax and regulatory frameworks as well as flexible access to foreign funding. Given the circumstances, creating a completely new act and registering them as startups can enable these distinct businesses to have access to comparable facilities across the nation.⁴⁴ Following the introduction

⁴⁰ Nandagopal, *supra* note 33.

⁴¹ Uttarakhand Industries Department [Noti. No. 371/VII-3-23/41-MSME/2016] Dated March 17, 2023.

⁴² Aaron D. Goldhamer, *How to Navigate Startup Laws for Your Business Growth Cycle*, WINSAVVY, (Aug. 6, 2024, 8:29 PM), <https://www.winsavvy.com/startup-cycle-laws-usa/>.

⁴³ Debarun, *supra* note 41.

⁴⁴ Kewal R Shah, *Gujarat International Finance Tec-City (Gift City): Charting Cross-Border Investment in India's New Financial Hub*, 4.3 JCLJ 342 (2024).

of initiatives such as “Make in India,” “Make for India,” and “Atmanirbhar Bharat,” the national government needs to be adamant about merging these into a single act, just like Israel came up with its draft⁴⁵. The most crucial—yet most challenging—task is to support businesses by cutting back on paperwork and legal requirements. Digitalization could help achieve such a goal.⁴⁶ As Mark Zuckerberg so aptly stated, “*The biggest risk is not taking the risk.*”⁴⁷ Furthermore, it is anticipated that unicorns and startups would grow significantly more in India in the near future. A recent poll conducted by Iron Pillar Funds predicts that by 2025, there will be 250 unicorns in India.⁴⁸

⁴⁵ Ehud Kamar, Ayal Shenhav, and Shay Yanovsky, Start-up Law in Israel (2020), <http://dx.doi.org/10.2139/ssrn.3543356> (last visited August 5, 2024).

⁴⁶ *Id* at 31.

⁴⁷ Shruti Gupta, *Start-ups in India - Evolution, Incorporation, Benefits: An Overview* 2.4 JCLJ 870 (2022).

⁴⁸ Shivani Shinde, *Factors that could slow the spawning of Indian unicorns in 2022*, BUSINESS STANDARD, https://www.business-standard.com/article/companies/factors-that-could-slow-down-the-spawning-of-indian-unicorns-in-2022-122042000200_1.html (last visited August 5, 2024).

5

Beyond Foreign Funds: Regulating and Reforming India's Domestic Startup Funding Landscape

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Abstract: This article analyses the importance of domestic funding within the Indian Startup ecosystem providing regulations and legal reforms for the same. India is one of the largest countries in terms of start-ups the entire start-up ecosystem almost predominantly relies on foreign capital, with over 85% of investments coming from overseas sources. The current global landscape including India's position in current matters has led to a significant decrease in terms of investment from foreign investors. This scenario has shown the weakness of the startup ecosystem and the lapses in the legislation. This research encapsulates legislative amendments along with practical application of the same to ensure proper mobilization of the domestic funds and thereby reducing reliance on foreign investments. The article analyses potential domestic funding sources, including pension funds, insurance funds, and high net-worth individuals, and proposes regulatory reforms to facilitate their increased participation. The paper analyses the importance of domestic investment, which will be possible provided there exist benefits of local markets, and it ensures stability and a better understanding while addressing potential challenges in balancing risk and investor protection. By highlighting the pertinent problems and the solutions, this paper aims to provide a roadmap for better implementation of policies that in turn, provide a stable, self-sufficient start-up environment in India.

Introduction

India's startup economy has been heralded as the world's third-largest startup ecosystem¹, with over 95,00 recognised startups and 115 unicorns as

¹ MINISTRY OF COMMERCE & INDUSTRY, GOVT OF INDIA, STARTUP INDIA, <https://www.startupindia.gov.in/content/sih/en/international/go-to-market-guide/indian-startup-ecosystem.html> (last visited Aug. 9, 2024).

of 2023². Its rapid growth, though commendable, has caused a double edged sword, placing an overreliance on foreign capital.

The present legal regime comprised primarily of the Foreign Exchange Management Act (FEMA) and various Securities and Exchange Board (SEBI)³ regulations have created a situation in which over 85% of startup funding is derived via global sources.⁴ This dependency exposes the industry to economic vulnerabilities, as evidenced by the absence of new unicorns in the first quarter of 2023 and the slowdown of foreign investment.

In turn, this research article delves into finding solutions to mitigate this risk by providing both legislative and policy reforms toward stopping the blockade against domestic funding. The upcoming sections provide in-depth solutions for employing of domestic capital in the startup ecosystem. By reframing the legal approach to startup funding, India can foster a more self-reliant and resilient ecosystem, better equipped to weather economic uncertainties and sustain long-term growth.

Understanding Funding Winter: A Symptom of Systemic Challenges

Over the last few years, the Indian startup ecosystem, previously hailed as one of the centres of innovation and growth, has entered what has come to be known as the “*funding winter*”. A phenomenon that is characterised by a significant decrease in venture capital investments and increased caution on the part of investors. The effects of which are multi-faceted and may have serious implications in the long run⁵.

The “*funding winter*” can be traced to a combination of both global and domestic reasons. From an international perspective, the increase in interest rates and the growing geopolitical tensions⁶ have promoted investors to take

² Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

³ Reserve Bank of India, Master Direction – Foreign Investment in India (Jan. 4, 2018), https://www.rbi.org.in/Scripts/BS_ViewMasDirections.aspx?id=11200 (last visited Aug. 9, 2024).

⁴ Indian Private Equity and Venture Capital Association & Ernst & Young, IVCA-EY PE/VC Agenda: India Trend Book 2022 (MAR. 2022), https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/private-equity/2022/ey-pe-vc-india-trend-book-2022.pdf.

⁵ V. S. P. Rao, *Indian Startups Funding Winter Persists: 72% Decline in 2023*, Business Standard (Aug. 10, 2024), https://www.business-standard.com/companies/start-ups/indian-startups-funding-winter-persists-72-decline-in-2023-report-123120800692_1.html

⁶ Akshat Shukla & Tanvi Agrawal, *Funding Winter in the Startup Market: The Effects and Regulatory Reforms*, NLIU CBCL (Nov. 27, 2022), <https://cbcl.nliu.ac.in/contemporary-issues/funding-winter-in-the-startup-market-the-effects-and-regulatory-reforms/>

a step back while investing in foreign countries.⁷ Domestically, the issues lie in the Indian startup ecosystem facing a turbulent period prompted by issues of governance, overvaluation, and unsustainable business models highlighted by high-profile cases. Some of the most recent examples are Byju's and Paytm.⁸ The two startups being on opposite sides of the valuation trend, and despite having been celebrated only recently, serve as cautionary tales for the community and investors.

Byju's once showing a promising start with a valuation of \$22 Billion in 2022 faced a staggering deduction by 95% by 2024 and finally filed for bankruptcy shortly after. The decline in the company's valuation occurred mainly due to unsustainable growth strategies, staggered financial reporting, and fraudulent sales practices. In the case of Paytm, the issue stems from another concern in the ecosystem regarding regulatory compliance.⁹ The Reserve Bank of India had closed Paytm Payments Bank for an indefinite period because of "*persistent non-compliance and continued material supervisory concerns*,"¹⁰ as well as diminishing trust in the market and an onslaught of worries from investors, who have been fleeing the startup in phases. This regulatory decision has wider implications, as it signifies both the limits of the business model of Paytm and similar companies and short-term concerns about the ability and willingness of startups to comply with regulations and manage their risks.

The effects of both headline cases along with geopolitical conditions globally have since created a sense of caution in the eyes of foreign investors who push towards stronger , sustainable growth methods, and regulatory compliance. In practice, this means lower valuations for startups and stricter due diligence, favouring startups with clear profitability pathways to those chasing growth at all costs.

However, though this shortage in FDI can be seen as a normal market reaction that may recover over time it raises questions on sustainability

⁷ Pricewaterhousecoopers, Startup Deals Tracker - Q1 CY23 (2023), <https://www.pwc.in/assets/pdfs/services/startups/start-up-perspectives-india-start-up-deals-tracker-h1-cy23.pdf>.

⁸ Tobias Wetzel, *Challenges of Start-Ups—An Analysis of Individually Tailored Recommendations Based on the Development Phases, Branches, Business Models and Founding Teams*, Vol. 12, Open Journal of Business and Management (2024). <https://www.scirp.org/journal/paperinformation?paperid=133111>

⁹ Akash Kumar Gope, *The Building and Fall of a Valuable Startup from India*, International Journal For Research and Publication (2023).

¹⁰ Reserve Bank of India, Press Release: Action against Paytm Payments Bank Ltd under Section 35A of the Banking Regulation Act, 1949 (Feb. 16, 2024), <https://www.lexsite.com/eDocs/1895.pdf>.

within the industry. It exposed structural vulnerabilities of the Indian startup ecosystem revealing how crucially undeveloped our domestic resources are towards Indian startups to take up the funding requirements during times like these.

Regulatory Roadblocks: Legal Barriers to Domestic Capital Mobilization

Tax Legislation Complexity and Irregularity

The Indian startup tax regime has been at the forefront of frequent changes and increasing complexity, causing a slew of challenges to entrepreneurs and investors alike. While the 2024 Budget has partly addressed these issues, the increasingly frequent changes have contributed to the prevailing atmosphere of regulatory uncertainty. For instance, the reintroduction of the LTCG tax in 2018 and subsequent changes have made it increasingly difficult to plan long-term investments. While the recent budget has addressed the planning aspect of LTCG by instituting a uniform 12.5% LTCG tax on all financial and non-financial assets¹¹, its cumbersome filing requirements for early-stage startups have still not been tackled. A comparable positive change has also been brought about by abolishing “Angel Tax” under Section 56(2)(viiib)¹² on startups but it is yet to be seen whether the existing startup litigations on angel tax payments would be dropped.¹³ At the same time, however, the ESOP taxation is still a point of confusion, despite recent modifications to defer taxation for eligible startups.

Finally, The introduction of the Goods and Services Tax (GST)¹⁴ regime, while simplifying indirect taxation in principle, has in practice added another layer of compliance complexity due to frequent rate changes, and evolving interpretations both at the state and national levels.

Dependency on Limited Investment Sources

The Indian startup environment is over-reliant on a few investment sources, including venture capital funds and alternative investment funds. The situation is intensified by rules limiting the available pool of capital. According to the SEBI regulations, a Category I or AIF cannot invest more than 25% of its investable corpus into a single company.¹⁵ As suggested by

¹¹ Ministry of Finance, *Key Highlights of Budget 2024-2025*, 13 (2024) <https://www.indiabudget.gov.in/doc/bh1.pdf>.

¹² The Income Tax Act, 1961, § 56(2)(viiib), No. 43, Acts of Parliament, 1961 (India).

¹³ *id* 91

¹⁴ The Central Goods and Services Tax Act, 2017, No. 12, Acts of Parliament, 2017 (India).

¹⁵ Securities and Exchange Board of India (Alternative Investment Funds) Regulations, 2012, pt. III sec. 4 reg. 15(1)(c), Gazette of India, (May 21, 2012).

the RBI guidelines, a bank's investments in VCFs cannot exceed 10% of the unit capital, limiting the scope of a valuable source of domestic investment. At the same time, though angel investment has been discussed specifically by a few policies, it still does not provide adequate financial support as seen in mature startup ecosystems. For reasons of credibility and market volatility, the reliance on the investor sources described above has disadvantaged the targeted startups in various ways. For instance, low dynamism and cyclical investments have served to protect investors from significant risks at the expense of the funding opportunities of early startups. Additionally, most domestic institutions such as pension funds and insurance firms are legally blocked from making investments in startups further reducing the funding corpus available domestically.¹⁶ Most importantly, the fact that a few investors dominate over 90% of the investment sources narrows down the accessibility channel, hindering the necessary innovations and growth in the startup sector.

High Interest Rates and Startup Competitiveness

The prevailing high interest rate environment in India presents several challenges for startups. The country's repo rate now stands at 6.5% as of 2024, meaning that the interest charged on loans is even higher. There exists a clear flaw when comparing the Indian banking environment to most of the established economies that show lower interest rates globally. This makes debt financing extremely costly for Indian startups leading to limitations in startup growth due to the high cost of capital. In turn, this situation forces startups to seek more equity financing, which can put their owners at a major disadvantage at early stage-startups.

Secondly, the use of expensive debt for Indian startups makes them less competitive as their operating and capital costs are higher than most of their global competitors. Such a scenario in the global context is not beneficial since international investors can put off investments due to much higher costs. In other words, the unfavourable interest rate situation may place Indian startups in an extremely disadvantaged position in the global startup market, and the situation undermines the country's overall growth and innovation potential.

Complex Initial Procedures for Indian Startups

An important constraint for startups in India consists of complex regulatory and procedural environments increasing the cost of both establishing a new

¹⁶ Chetana Asbe, *The Wave of Alternative Investment Funds in India*, Vol. 10, *International Journal of Financial Management* (2023). https://www.researchgate.net/publication/372190473_THE_WAVE_OF_ALTERNATIVE_INVESTMENT_FUNDS_IN_INDIA

venture and creating an angel investment mechanism. India is infamous for imposing stringent conditions to give adequate protection to investors. However, these conditions act as a hindrance for investors. For example, while the Companies Act, 2013^{17a,b} has attempted to provide comprehensive regulations, it also provides detailed compliance processes that may hinder the easy flow of investment. For example, conditions under the private placement procedure as provided in Section 42 of the Act¹⁸ entail an ambiguous and somewhat complicated procedure for the allotment of shares thereby making it difficult for first-time entrepreneurs. Domestic investors who have not properly understood these conditions in turn face difficulties managing compliances and refrain from investing.

Furthermore, the conditions in which Alternative Investment Funds (AIFs) are established and regulated in India are equally multifaceted. For example, the SEBI (Alternative Investment Funds) Regulations, 2012 require each scheme of Category I and II AIF to have a corpus of not less than ₹ 20 crore.¹⁹ The requirement for such a high corpus creates additional barriers to entry for potential fund managers. Moreover, there are multiple compliances under different laws and associated costs for companies to meet such compliances. For example, a company will have to comply with the Companies Act, FEMA, and SEBI regulations. The multitude of statutes increase the level of compliance cost along with the administrative work for early-stage startups.

Regulatory Instability and Investor Confidence

One of the crucial shortfalls of the Indian startup ecosystem is the lack of regulatory stability. An illustrative example is the definition of a ‘startup’ itself. The definition of startup status under the Start-Up India program has changed time and time again, leaving businesses and investors uncertain as to what rewards and benefits they can count on. The same applies to the Foreign Direct Investment policy, which is of crucial importance for the influx of

^{17a} Saifiullah, M., Iqbal, M. I., & Parveen, N. (2024). Challenges and opportunities within the evolving CSR landscape in India. *Technology-Driven Evolution of the Corporate Social Responsibility Ecosystem*, 46-60.

^{17b} Saifiullah, M., Anchal, & Parveen, N. (2024). Brand Building Through CSR Initiatives During Hajj and Umrah: A Study of Tourism Industry. In *Corporate Social Responsibility, Corporate Governance and Business Ethics in Tourism Management: A Business Strategy for Sustainable Organizational Performance* (pp. 85-92). Emerald Publishing Limited

¹⁸ The Companies Act, 2013, § 42, No. 18, Acts of Parliament, 2013 (India).

¹⁹ Taxmann, *Exploring the SEBI (Alternative Investment Funds) (Second Amendment) Regulations, 2023*, TAXMANN (June 17, 2023). <https://www.taxmann.com/post/blog/exploring-the-sebi-alternative-investment-funds-second-amendment-regulations>

foreign capital into India. While some of the steps taken by the Indian government as part of this policy were aimed at liberalizing the investment climate, changes in this field have been frequent. While the laudable goal of these changes is to ensure that the investment environment is as open as it can be, the annual pace of change is sending the wrong message to foreign investors.²⁰ The same is applicable to the regular changes applied to tax benefits to startups and those who decide to invest in them, exposing both types of stakeholders to risks and preventing businesses from planning their financial activities effectively. Overall, these frequent and often unpredictable changes add both direct and indirect costs to business activities in India, potentially scaring both domestic and international investors away.

Proposed Solutions: Enhancing the Regulatory Framework for Startup Funding in India

Reforming Tax Legislation for Stability and Incentives

India should consider implementing a comprehensive reform package to address the complexity and incoherence of the tax legislation. First of all, the existing tax holiday under the Income Tax Act's Section 80²¹ should be expanded to a longer period, which allows new businesses to stay exempt from corporate tax for up to 10 years. This along with the patent box, modelled after the Switzerland regime, would ensure innovation and R&D, attracting startups to develop and market their intellectual property in India. Secondly, an adaptation of the Seed Enterprise Investment Scheme²² that focuses on tax reliefs for startups can be implemented. The scheme offers immediate income tax relief in terms of personal income tax relief, capital gains exemption, and loss relief to angels²³. Its implementation would greatly increase early-stage investments and also start a cycle of reinvestments in India. Finally, a simplified GST system, modelled after a mix of CGST, SGST, and IGST, as

²⁰ Shilpi Sharma, *A Study on Indian Public Policy and Proposal for Linking Income Tax Regime to Promote Entrepreneurship Schemes*, Vol.3, INTERNATIONAL JOURNAL OF RESEARCH PUBLICATIONS AND REVIEWS(2022). https://www.researchgate.net/publication/366387901_A_Study_on_Indian_Public_Policy_and_Proposal_for_Linkin Income_Tax_Regime_to_Promote_Entrepreneurship_Schemes_-_International_Journal_of_Research_Publication_and_Reviews_Vol_3_Issue_12_2022_pp_1198-1

²¹ The Income Tax Act, 1961, § 80, No. 43, Acts of Parliament, 1961 (India).

²² HM Revenue and Customs, *HS393 Seed Enterprise Investment Scheme — Income Tax and Capital Gains Tax reliefs*, GOV.UK (May. 2, 2024). <https://www.gov.uk/government/publications/seed-enterprise-investment-scheme-income-tax-and-capital-gains-tax-reliefs-hs393-self-assessment-helpsheet/hs393-seed-enterprise-investment-scheme-income-tax-and-capital-gains-tax-reliefs-2024>

²³ *Id.*

well as a destination-based tax model, enabling export promotion and lower compliance burden would be highly impactful to remove complex procedures. These amendments to Income tax act and GST laws would result in a more stable and incentive-based tax system for startups as well as investors.

Diversifying India's Startup Investment Options

Developing a comprehensive approach for expansion and diversification of domestic sources of capital for startups in India is indeed possible. The first measure that may be implemented is emulating the experience of U.S. and Sweden in terms of capital allocation.²⁴ As per their system pension funds are encouraged to allocate a proportion of the total assets as venture capital investments in startups. The Indian regime can make amendments to the Pension Fund Regulatory and Development Authority Act, 2013²⁵ to facilitate investments and better participation of pension funds. Support mechanisms enabling the creation of venture capital trusts or pension fund-backed AIFs may also be employed, which could facilitate risk spreading. Another measure that can be implemented is expansion of investors' options. Specifically, it is advisable to increase the maximum holding of AIFs in the capital of the startup, as well as their funding. Similarly, the caps for bank investments in startups should be increased. Corresponding amendments to the SEBI Regulations, 2012²⁶ and relevant RBI guidelines will enable an effective increase in funding options. In addition, public-private partnerships are advised to be formed specifically for professional management to be combined with a precise venture investment analysis in order to place the investments in specific categories to inform potential investors. From a critical approach, the final measure, i.e. risk management, can be implemented through indicators that enable diversification in line with SEBI requirements. It is assumed that the proposed measures collectively may thoroughly broaden the range of domestic capital sources available to startups whilst ensuring reasonable risk. Also ensuring a maximum cap in terms of investment in high risk startups thereby reducing the overall risk of losing investor's money.

Stabilising India's Startup Policy Environment

The issue of frequent policy changes by the Indian Government needs to be addressed by making sure that there are measures in place to enhance

²⁴ Dalia Kaupelytė, *Stimulating Pension Funds' Investments To Venture Capital: Opportunities In European Union Countries*, No.3, EUROPEAN INTEGRATION STUDIES, 89 (2009).

²⁵ Pension Fund Regulatory and Development Authority Act, 2013, No.23, Acts of Parliament, 2012 (India).

²⁶ *Supra* note 95.

regulatory stability and predictability. If India implements a multi-year policy framework for startups as found in countries like Singapore or Estonia, it would establish the long-term goals, clear system and regulations which will not change for a predetermined period²⁷.

India could adopt the policy in the form of a Startup Act, which would lay down regulations ensuring a steady environment.²⁸ A single designated regulatory body should be established which would ensure a single point of contact rather than multiple bodies creating confusion. If India formally introduces a protocol for startup representatives to be consulted before changing any policies, such protocol would ensure that any introduced regulations are practical for the ecosystem. The new regulations could place grandfathering clauses for existing startups in India so that they would be effectively exempt from any new regulations for a given period and would thereby be able to avoid any sudden changes. India could also introduce a system of regulatory sandbox, which would allow startups to test out new services or products with some relaxation of regulations. These measures will create an environment for nurturing the startups, thus promoting innovation and sustainable growth in the sector. This could be introduced in the form of law, and together this will impact the entire cycle of startups.

Streamlining Startup Procedures and Compliance

To address the complex procedure associated with early stage of startups, a series of legal and regulatory simplifications should be instituted providing clear guidelines and a way forward thereby reducing complications. For reduction of time and complexity surrounding the allotment of shares, the private placement procedure under Section 42 of the Companies Act, 2013²⁹ should be streamlined. Further, the minimum corpus requirement for Category I and II AIFs investing in startups should be standardized and lowered by amendments to the SEBI Regulations, 2012. Startups should also be able to benefit from a single window clearance system for startup-related compliances. There needs to be agreements among different regulatory bodies/ departments for sharing of data through an integrated digital platform which would have to be developed and maintained and should become the

²⁷ SEBI, CIR/Master Circular for Alternative Investment Funds, Securities and Exchange Board of India. <https://www.cdsindia.com/downloads/Publications/Communique/SEBI-CIR-Master-Circular-for-Alternative-Investment-Funds.pdf>

²⁸ Eulalia Skawińska, *Success Factors of Startups in the EU—A Comparative Study*, DEPARTMENT of ECONOMY AND MANAGEMENT (2020).

²⁹ The Companies Act, 2013, § 42, No. 18, Acts of Parliament, 2013 (India).

only channel for regulatory reporting. This would require legislative support and changes to existing acts to allow different departments to share data.

Liquidity and Credit Solutions for Startups

In order to understand the influence of high interest rates and mitigate their effect on startups, both regulatory changes and innovative financing tools need to be implemented. From a regulatory perspective, the RBI should establish a special liquidity window to allow banks to access funds at a lower rate and loan these funds to startups. Relevant amendments should be made to the RBI Act, of 1934, and the details of the implementation may be defined by the central bank. Furthermore, the RBI could enhance the capacity of its flagship Credit Guarantee Fund Trust for Micro and Small Enterprises and ensure that the CGTMSE positively covers startups, encouraging banks to target more lending toward these risky projects by creating credit guarantee schemes. On the financing side, the government of India should promote the creation of a legal framework that will allow the use of intellectual property and cash flow-based financing, including securitisation and factoring. It implies changes to be made in the SARFAESI Act. Lastly, the RBI should create regulatory incentives for banks to support startups by participating in incubators, accelerators, and venture capital firms. Thus, in complement to the three proposed schemes, the measures that involved banks incentivised by RBI central supremacists would create an enabling environment to finally help startups substitute the need for further equity with debt to operate and scale cost-effectively.

Conclusion

Through the above arguments, we identify that the Indian startup system is at a crossroads. Although the industry has grown and innovated substantially over the past decade, the recent funding winter coupled with multiple high-profile failures of corporate governance have shown that the system in place is highly vulnerable and unreliable.

The research article, in turn, identified several aspects of legislative control that would need immediate attention. The features listed would necessitate a compromise between the need for investor security and the efforts to support risky but potentially rewarding projects, thus requiring multi-levelling response strategies. Overall, the reforms proposed including tax, investment, stabilization, simplification, and interest rates, along with the conducted and recorded research, offer a feasible route from development. In this regard, the legislative changes suggested could become a roadmap for change.

Nevertheless, it is important to note that merely implementing legislative reforms would not enhance the system, as the problem of controlling investment opportunities is too intricate for such a solution. Hence, startups should adopt a more proactive approach, enhancing their understanding of business opportunities, and prepare for more governance-focused business model.

6

Balancing Innovation and Regulation: Role of Blockchain Policy in Shaping India's Startup Ecosystem

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Abstract: India's startup Ecosystem is experiencing remarkable progress, with blockchain technology emerging as a major driver of innovation. Yet, the regulatory uncertainties tend to hinder the transformational potential of blockchain. This study aims to explore the complex connection between innovation and regulation of blockchain technology in startups. This research focuses on examining how current regulations affect startups and explores international regulatory approaches to show the challenges and potential benefits of adopting blockchain technology in the operations of startups. The study suggests a well-rounded policy framework that seeks to balance the importance of innovation with necessary regulatory measures, such as consumer protection and ensuring financial stability. This structure aims to create a positive atmosphere for startup businesses, promoting growth and supporting expansion while tackling security and technological obstacles. Furthermore, the study highlights specific areas where policy interventions can lead to notable enhancements and strengthen India's competitive stance in the international commercial arena. The research provides practical insights for policymakers to establish a more encouraging corporate environment, positioning India as a frontrunner in blockchain technology worldwide. The study contributes to existing research by providing a specific approach for connecting innovation and regulation for emerging startups looking to leverage the benefits out of blockchain technology.

Keywords: Startups, Blockchain Technology, Regulatory Framework

Introduction

Blockchain technology is already a major innovation booster among the global expanding startup environment. However, the regulatory

uncertainties associated with this innovative technology provide challenges to its widespread acceptance and potential advantages. This study explores the complex relationship between the regulation of blockchain technology and the innovation it encourages in Indian entrepreneurs.

The study goes on to examine the global regulatory frameworks to determine the opportunities and constraints associated with blockchain integration, as well as the impact of current rules for blockchain-based startups in India. Through a thorough analysis of the existing regulatory landscape and its effects on innovation, the research aims to provide a well-balanced policy framework that advances technological advancement while attending to critical concerns like financial stability and consumer safety. Using a doctrinal approach, the study collects qualitative data from primary sources like laws and precedents as well as secondary sources like publications, journals, and reports. The data collection process used a grounded theory approach, which produced clearly specified research objectives. The previously gathered qualitative data was examined using the method of thematic analysis. Thematic analysis is wherein, in order to find recurring themes, topics, concepts, and patterns of meaning, the researcher carefully reviews the data.

This research adds to the body of knowledge by offering a nuanced perspective on how innovation and regulation might coexist for blockchain Startups in India. It provides policymakers with useful advice on how to create a more welcoming business environment and possibly establish India as a frontrunner in the worldwide adoption and advancement of blockchain technology.

Background of India's Startup Ecosystem

In the last decade, there has been a rise in the number of startups in India and even globally. With their growing numbers, MSMEs are becoming recognized on a global scale as vital drivers for economic growth and job creation. Startups have the unique ability to be vehicles for socio-economic development and transformation by being pioneers in bridging purpose with innovation through scalable technology, across issues ranging from financial inclusion to environmental conservation.¹ This confluence has delivered multiple innovative ventures, and one such important area is the blockchain domain. The Indian government has acknowledged the possible uses of

¹ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

blockchain and on a general note tried its hands to promote this technology while simultaneously understanding regulation for such dynamic emerging technology.²

In the blockchain arena, India has seen an upward trend in blockchain startups spreading across sectors such as fintech, supply chain management, and digital identity. But the landscape has been complicated by a state with rapidly evolving and confusing regulations. In 2018 the initial muddled response of the Reserve Bank of India towards cryptocurrency was indeed blurred; however, events like the decision by the Court in 2020 where the crypto banking ban was remitted and thus refurbished enormous positivity for innovation via law-tech.³ This kicked off the government's search for an appropriate legislative mechanism around blockchain space, ensuring innovation without compromising on financial stability, consumer protection, and last but not least, curbing illicit activities.

The Indian government has found it difficult to draft comprehensive legislation for the blockchain and cryptocurrency industries due to the technology's rapid evolution and the need to balance innovation with security and regulatory compliance. Furthermore, problems such as establishing the jurisdictional extent and addressing concerns about bitcoin misuse have hindered the establishment of unambiguous laws and formulations.

Blockchain: An Overview

Blockchain acts like a middleman in economic transactions and a trustworthy intermediary. Blockchain technology encodes game rules as computer programs and allows entities with different interests to collaborate on an immutable ledger, resulting in a system that follows the rules and prevents transactions that do not meet agreed-upon conditions. Blockchain technology promises frictionless transactions that make doing business and living easier by removing intermediary charges, brokerage, etc thereby reducing adhocracy. A blockchain ledger is a series of data records or transactions distributed in many computers by network. It is a transparent and unchangeable database where you save information, timestamp the record, add cryptographic security to it to make sure of its validity, and do it in sync with your network (virtually) using organic consensus algorithms

² Indian startup ecosystem alt. <https://www.startupindia.gov.in/content/sih/en/international/go-to-market-guide/indian-startup-ecosystem.html> (last visited August 4, 2024).

³ Suchitra Mohanty and Nupur Anand, *India's top court strikes down RBI banking ban on cryptocurrency* | reuters, Reuters, <https://www.reuters.com/article/us-india-cryptocurrency-indias-top-court-strikes-down-rbi-banking-ban-on-cryptocurrency-idUSKBN20R0KV/> (last visited August 3, 2024).

(e.g., proof of work), for this reason making it nearly impossible to hack or change.⁴

Implementing Blockchain in India and its Viability

While blockchains are effective for storing transactional data, they are not considered suitable for large data volumes. For example in the case of a large financial transaction between a Bank or a Company and an entity, while a transaction record can be stored on the blockchain with details such as loan amount, date of disbursement, interest rate, due date, lender, and contract information, storing the underlying documents (e.g. loan agreements) may be costly and time-consuming. This provides a two-fold problem. Verifying a transaction record without accompanying evidence can be challenging, perhaps leading to fraud. Another issue being that, without blockchain's immutability and security capabilities, transaction documentation is vulnerable to fraud and manipulation, so before the advancement of the same, proper levels of security system and its related aspects ought to be examined. As a result, the advantages of blockchain technology may not be completely appreciated.⁵

India's Strategic Approach to Blockchain: Building on Digital Foundations

The approach to regulating blockchain in India presents an interesting example of the way existing digital infrastructure can be used to advance innovation while setting the conditions for full integration. The government has also been proactive in creating an enabling environment by taking certain measures to make way for blockchain adoption. The government was able to establish a foundation for digital infrastructures like Aadhaar, UPI, e-Sign, Digilocker, and others. These build up a resilient framework of identity and transactions that can easily integrate with blockchain solutions for enhanced efficiency and security.

The government has looked into blockchain applications in sectors such as agriculture, supply chain management, and healthcare. The focus on sector-specific implementations has an objective of utilizing the power of blockchain in bringing better transparency, reducing fraud, and making processes more efficient. Further, India is using a public-private partnership model wherein the government creates public digital infrastructure while

⁴ Ibm (2024) *What is blockchain?*, IBM., <https://www.ibm.com/topics/blockchain> (last visited August 1, 2024).

⁵ *Blockchain the India Strategy Part I.*, https://www.niti.gov.in/sites/default/files/2020-01/Blockchain_The_India_Strategy_Part_I.pdf (Last visited August 1, 2024).

encouraging private sector innovation to build upon it. This, thus becomes the key for far-reaching blockchain adoption and a vibrant ecosystem in this collaboration.

India having Aadhaar and UPI puts it ahead of most countries since a large-scale Blockchain implementation would solve the two most critical problems of any Blockchain application in any country, which are identity verification and transfer of value. Since its inception, the government through NITI Aayog has actively followed up and sought out various case scenarios in which blockchain technology could be adopted specifically for India, giving much more preference and commitment toward reaping the benefits of blockchain.⁶

This will not only give India a strategic advantage in implementing blockchain across the various sectors of the economy but also the real benefits to be accrued with a developed digital infrastructure that is now contained within the illustrative potentials of blockchain. Although in the draft form, these definite regulations show some rational frame of mind and assiduity on the part of the government acting in fine-tuning and ironing out an adequate and well-set regulatory regime related to blockchain within India. Treading through this middle path, which has emphasized innovation along with integration, India dreams of assuming a lead role in the global landscape of blockchain.

Overview of Existing Blockchain Regulations in India

The regulatory framework of India on blockchain and cryptocurrencies has largely been undefined and without any clear legislation. Cryptocurrencies are not exactly illegal but are not considered legal tender either. The government has, however, introduced a taxation framework by which a 30% tax will be levied on the income from VDAs and a 1% TDS on transactions above specific limits. The RBI, Ministry of Finance, and SEBI assume center stage as regulators in this space. Although it had banned crypto banking earlier, the 2020 judgment of the Supreme Court removed that ban, bringing partial clarity. The proposed Cryptocurrency and Regulation of Official Digital Currency Bill, 2021, which might prohibit private cryptocurrencies, hangs over the landscape like the ‘Sword of Damocles’.⁷ Indian startups in the blockchain and cryptocurrency space had a lot to thank the Supreme Court

⁶ Counterpoint, https://www.counterpointresearch.com/research_portal/will-unified-payment-interface-upi-bring-financial-inclusion-in-india/ (last visited August 2, 2024).

⁷ Gadodia, M. (no date) [the viewpoint] regulation of Virtual Digital Assets in India, Bar and Bench - Indian Legal news, <https://www.barandbench.com/view-point/regulation-of-virtual-digital-assets-in-india> (Last visited August 3, 2024).

for once it scraped the RBI ban on crypto banking in 2020. It allowed startups to innovate, attract investments, and participate in global crypto ecosystem, by restoring banking access. But with no coherent regulatory framework, the long-term effects are uncertain. The 2021 draft bill, potentially banning private cryptocurrencies and imposing high taxation (30% on VDAs), is a challenge for startups too. The answer to the question of whether India can become a global hub for blockchain is caught up in regulatory ambiguity that harnesses too much force in a quieter direction, causing many to operate conservatively or to relocate, potentially hindering India's potential.

The Reserve Bank of India has been less than sanguine about the idea of cryptocurrencies, mostly because they undermine monetary sovereignty and financial stability. However, it has shown interest in developing a Central Bank Digital Currency (CBDC). The government showed a very careful stance, balancing the potential for innovation against concerns for financial stability and illicit activities. Hence, what ensued was a number of piecemeal regulatory actions instead of a cohesive policy. While things stand as they are, India seems neither to be fully legalizing nor effectively banning the use of cryptocurrencies. Some of the state governments, like Telengana, do realize the potential of blockchain, which gets manifested in projects such as the Telengana Web3 Sandbox, but at the same time remain engaged in designing a regulatory framework for associated risks and concerns.

Impact on Blockchain-Based Startups

Blockchain technology has significantly impacted cryptocurrency-based startups by providing an innovative method for fundraising through token offerings, which allows entrepreneurs to raise capital efficiently and cost-effectively. The transparency and security features of blockchain increase trust among investors, enabling startups to access a broader pool of potential backers. The decentralized nature of blockchain technology reduces the dependency on traditional financial institutions, giving startups more control and flexibility in their financial operations.⁸ The RBI Governor in a press conference in the month of June 2022, said that "The Reserve Bank of India (RBI) hopes to cooperate with multiple top Indian banks to build a proof-of-concept blockchain project focusing on trade financing. Among those taking part in the scheme to combat loan fraud are HDFC Bank, ICICI Bank, and State Bank of India, as reported by The Economic Times. The project will issue digital versions of documents such as letters of credit (LC) to prevent their alteration. Digital documentation could prevent scams

⁸ *Report on Currency and Finance: Reserve Bank of India, 2021-22*

involving billions of rupees, such as those perpetrated by Nirav Modi and Mehul Choksi. The central bank intends to integrate blockchain technology into its core banking system and will utilize this experiment to demonstrate the concept's viability.”

Global Blockchain Regulatory Approaches

Amongst countries, there are large differences in the regulatory approaches towards blockchain, thus reflecting different attitudes. There exist countries that have given extremely supportive regulatory frameworks to blockchain, like Switzerland and Singapore, while other countries, like China, have remained very restrictive, especially about cryptocurrencies. In the U.S., legislative bodies and regulators have yet to establish a framework tailored to cryptocurrencies that directly equates to the traditional regulation seen in securities or commodity markets. They mainly apply existing financial regulations to cryptocurrency. Cryptoassets may be categorized as securities or commodities based on their functionalities and the context of their use. The European Union is working on a common framework, and one such initiative is MiCA, Markets in Crypto-Assets, aimed at harmonizing rules across nations that are members. The changing position of India, dominated by caution but an exploratory approach, explains the dynamic nature of global blockchain regulation, wherein nations wrestle with the balance between innovation, stability in finance, and consumer protection.⁹

Positive regulatory attitudes concerning cryptocurrencies have motivated about 58 countries to pursue a forward-thinking policy of technological innovation by integrating legal tender with digital assets within the monetary system. In some cases, when cryptocurrencies have been recognized as legal money like in El Salvador, it indicates each country's openness toward blockchain technology benefits. The hazards associated with market risk and the potential use for illegal activities drive along the support, which is very welcoming. More than 14 countries have banned cryptocurrencies; others have opted for partial restrictions or heavy compliance measures to address their AML/CFT concerns. For those like the United States or members of the European Union, the acceptance toward cryptocurrency as part of their financial system is gradually changing with evolving regulatory balance. The United States has a dual government system that allows states to enact their regulations, leading to a mosaic of laws that may either foster or curtail

⁹ *Cryptocurrency regulations are changing across the globe. here's what you need to know* (no date) *World Economic Forum*. Available at: <https://www.weforum.org/agenda/2024/05/global-cryptocurrency-regulations-changing/> (Last visited August 2, 2024).

Bitcoin activity. The UK's approach to cryptoasset regulation involves the incorporation of existing regulatory frameworks. In 2018, the "Cryptoassets Taskforce (CATF)" was formed. The CATF notes that the crypto market presents both new opportunities and potential challenges.

Proposed Policy Framework for Blockchain in India

The complexities of blockchain integration means that India has to make a dual approach in creating an ecosystem that encourages innovation while protecting against its associated risks. To that end, this would look into a holistic policy framework in striking a delicate balance between technological advancement and safety mechanisms which will allow the new technologies to be exploited without compromising consumer protection or financial stability.

The approach to regulation in India concerning Blockchain has to be articulated with extreme care and deep knowledge to understand the challenges of blockchain technology. The DAO hack in 2016 is a practical example: vulnerabilities in smart contracts can result in gigantic financial losses and even disrupt the functioning of financial networks.¹⁰ It exploited one of the many flaws in the DAO smart contract, leading to significant thefts and a rather controversial hard fork in Ethereum.¹¹ This makes India compel stringent security audits and code reviews before deploying blockchain applications to mitigate such risks. In such a scenario, accredited third-party entities can have a certification process for smart contracts to ensure that only rigorously vetted technologies reach the market. Moreover, as observed in the Mt. Gox collapse in 2014, it is the regulatory control that can prevent the fallout of the markets. Mt. Gox was one of the largest cryptocurrency exchanges before it collapsed due to an inability to maintain security and consequently declared bankruptcy, which terribly affected the market of cryptocurrency and the confidence of the investors¹². Ensuring that India can have strict security standards in enforcement and operational transparency in the exchanges will forestall such failures. This can be done by compelling an exchange to maintain insurance coverage for funds of the users, conducting regular security checks and assessments, and having robust anti-fraud measures in place. A regulatory sandbox for blockchain startups

¹⁰ "Regulation by blockchain: the emerging battle for supremacy between the code of law and code as law, Yeung, Karen" *The Modern Law Review* 82.2 (2019): 207-239.

¹¹ "Digital assets and blockchain: hackable, fraudulent, or just misunderstood?." Castonguay, John "Jack, and Sean Stein Smith *Accounting Perspectives* 19.4 (2020): 363-387.

¹² Huber, T. and Sornette, D. (2020) 'Boom, Bust, and bitcoin: Bitcoin-bubbles as innovation accelerators', *SSRN Electronic Journal* [Preprint]. doi:10.2139/ssrn.3599179.

empowers them to experiment in real-world conditions and hence strikes a balance between innovation and risk management.

In the UK, the Financial Conduct Authority's sandbox allowed the digital transperancy company Everledger to create its blockchain-based solution for tracking luxury goods, which improves supply chain transparency and helps prevent fraud.¹³ Likewise, Singapore's Monetary Authority of Singapore (MAS) sandbox assisted BondEvaluate in testing its platform for fractional ownership of bonds, making high-value bonds more accessible within a well-defined regulatory framework.

In Australia, the use of blockchain was championed by the Australian Securities and Investment Commission (ASIC) through its sandbox, where companies like Power Ledger had the opportunity to experiment with the blockchain-based p2p energy trading. This solution helps to promote energy sustainability since consumers can sell excess power to other consumers without any inconveniences.

These examples prove that sandboxes provide startups with the opportunity to implement actual compliance and advancements across specific industries as well as supply chain and financial processes while maintaining the proportion between the innovative approach and the legal framework.

Consumer Protection Measures

The assurance of consumer protection will come at the forefront while building trust in the blockchain technology. The 2017 hack of the Parity Wallet is a case in point for the risks brought in by smart contract vulnerabilities and the irreversibility of their losses. The policy framework of India has to embrace a few key steps toward mitigating these risks.¹⁴ First of all, it should enforce the periodic smart contract audit by independent accredited auditors who must assess the code to discover the vulnerabilities and rectify them in advance before exploitation. Second, develop schemes on insurance or compensation wherein the user shall have redressal mechanisms available for himself in case of security breach or malfunction. Precisely, national awareness campaigns regarding the risks and benefits associated with blockchain technology

¹³ Butor-Keler, A. and Polasik, M. (2020) 'The role of regulatory sandboxes in the development of innovations on the financial services market: The case of the United Kingdom', *Ekonomia i Prawo*, 19(4), p. 621. doi:10.12775/eip.2020.041.

¹⁴ "Security evaluation of smart contract-based on-chain ethereum wallets." Praitheeshan, Purathani, Lei Pan, and Robin DossNetwork and System Security: 14th International Conference, NSS 2020, Melbourne, VIC, Australia, November 25–27, 2020, Proceedings 14. Springer International Publishing, 2020.

should be conducted among users, accompanied by educational programs. Democratizing awareness about the safe practice and threats associated might engage users more safely with blockchain applications.

Financial System Stability

India must introduce the necessary regulations to maintain stability in its financial system while adopting blockchain technology. The 2018 attack on Bitcoin Gold emphasized these risks on smaller blockchain networks and thus on market confidence when it suffered from a 51% attack. Thus there should be minimum security standards set for blockchain systems.¹⁵ For example, they might include robust consensus mechanisms as well as additional safety measures against attack. The network validation guidelines could be developed from some of the existing trustworthy consensus protocols such as Proof of Stake and Proof of Work could become popular. Regulation will also be very crucial in curbing blockchain-based financial products and services by reducing systemic concerns.¹⁶ As cryptocurrencies are normally used as native tokens in most blockchain networks, people will transact business with them too.¹⁷

To prevent unwarranted leverage and exposure during cryptocurrency transactions always, it would be significant to ensure strict compliance with AML–CFT standards through transparent reporting. There is also a portion about looking into building a digital currency for central banks which could help increase adoption rates for this technology under regulations that support monetary policy frameworks.

Conclusion

India's policy on blockchain technology has to maintain a delicate balance between an enabling environment for innovation and making provisions for regulation. With transparency and efficiency, characteristics that do not exist in the present scenario, blockchain is huge in transformational potential, more so in thematic areas of finance, supply chain, and health. The

¹⁵ "Impact of macroeconomic news, regulation and hacking exchange markets on the volatility of bitcoin."Lyócsa, Štefan, et al , *Journal of Economic Dynamics and Control* 119 (2020): 103980.

¹⁶ Qihao Bao et al. (2022) *A survey of Blockchain Consensus Safety and Security: State-of-the-art, Challenges, and future work*, *Journal of Systems and Software*, <https://www.sciencedirect.com/science/article/abs/pii/S016412122200231X> (Last visited August 4, 2024).

¹⁷ Chang, V. et al. (2020) 'How blockchain can impact financial services – the overview, challenges and recommendations from expert interviewees', *Technological Forecasting and Social Change*, 158, p. 120166. doi: 10.1016/j.techfore.2020.120166.

risks associated with blockchain are nonetheless real, as has been exposed by events such as the DAO hack of 2016 and Mt. Gox collapse in the year 2014. In order to get away with these instances strict security audits for smart contracts, consumer protection measures, guidelines for financial products, and network security have to be part of a well-structured policy for protecting users and society at large. These vulnerabilities can be used to build trust with the user and rectify the vulnerabilities. India may look into the establishment of a central bank digital currency, which could serve as an enabling platform for the regulated use of blockchain, providing a basis for supporting economic stability and innovation.

India must have a fluid, dynamic approach to blockchain so as to timely adapt, as the technology and its practices are developing over time. This will allow India to benefit from it and manage its economic foundations through proper standards that are in line with internationally recognized methods, eventually making it a leader in the sector.

Balancing Innovation and Regulation: Evaluating the Impact of Draft Digital Competition Bill on Startups

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Abstract: This paper explores the potential impacts of the proposed legislation on India's burgeoning startup ecosystem. The Draft Digital Competition Bill aims to regulate enterprises providing Core Digital Services (CDS) by designating them as Significant Strategic Digital Entities (SSDEs) based on financial thresholds and user base criteria. This designation is intended to address issues of market dominance and unfair practices by larger companies. The study identifies the limitations of previous competition laws and evaluates whether the new bill effectively fosters fair competition, particularly for smaller startups. While the bill intends to curb monopolistic behaviours, it may inadvertently impose a heavy compliance burden, stifle innovation, and deter investment, potentially hindering the growth of startups. By analysing the bill's provisions, the paper discusses how the designation of SSDEs might influence the digital market landscape, considering the need for tailored compliance measures and support systems for innovation. The paper also examines whether the current competition law framework could be strengthened to address digital market challenges without introducing new legislation. The goal is to offer practical recommendations to ensure the bill supports rather than stifles the growth of homegrown startups, thereby contributing to a more dynamic and fair digital economy in India.

Keywords: *Digital Competition Bill, Startups, Core Digital Services, Significant Strategic Digital Entities, Indian Digital Economy*

Introduction

The rapid growth of the digital economy has presented a critical challenge for startups in balancing innovation and healthy competition¹. The Draft Digital Competition Bill 2024 emerges as an important response to this challenge, aiming to create a competitive environment for businesses and addressing growing concerns about the market core among tech giants. This bill introduces new rules designed to curb anti-competitive practices and level the playing field in digital markets. But the potential impact on startups, the lifeblood of innovation in tech, needs to be examined more closely. Therefore, it is essential to tackle these issues by adopting the criteria of balanced control and pro-competition activities that can produce a more innovative digital landscape in India.

This study seeks to examine the implications of the law for start-ups, exploring opportunities and challenges. The key questions are:

- (a) How will this regulation affect the ability of startups to innovate and grow?
- (b) What compliance burdens might startups face, and how might this affect their operations?
- (c) How might the competitive landscape change, and what new opportunities or obstacles might arise?

By addressing these questions, we aim to contribute to an ongoing dialogue about balancing regulation and innovation in the digital age. Our goal is to provide insights that can inform policy recommendations, ultimately supporting a growing digital ecosystem, competitiveness and innovation.

Carving The Future: Objectives And Regulatory Framework

The Digital Competition Bill 2024 (hereinafter the Draft Bill) denotes a significant advancement in confronting the escalating anxieties pertaining to the aggregation of authority among prevailing digital platforms and service providers. Fundamentally, the bill's intentions are oriented towards nurturing a more dynamic and competitive digital economy through the introduction of a comprehensive regulatory structure. A principal component of this framework is the creation of the Digital Markets Unit (DMU), which is a dedicated agency assigned with the responsibility of monitoring the execution and enforcement of the provisions articulated in the bill. The

¹ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

DMU is anticipated to assume an integral position in guaranteeing uniform and efficacious regulation throughout the digital realm.

Historical Evolution: Tracing Digital Regulation

The rapid growth of the ICT industry informs the rather fast rate of change in regulations on the digital market. “It was in 2018 when the GDPR regulation was released that it built the proper framework, and concepts for the DMA were invented soon after.”²

India has started on an untrodden route to assume control of the digital economy. India enacted the IT Act in 2000; initially, it focused on fundamental information laws. “Thus, more monitoring was needed because the digital economy grew rapidly. Nevertheless, the Competition Act of 2002 created the basis for fair competition despite the fact that the law did not address online marketplace directly.”³ With the Personal Data Protection Bill proposed and the new attempt at the Digital Competition Bill 2024, India is trying to solve the peculiarities of the Indian digital economy’s problems.

Assessing The Transition: Competition Act 2002 Vs. Draft Digital Competition Bill 2024

While the Competition Act, of 2002⁴ was specifically aimed at tackling anti-competitive agreements, abuse of dominant positions, and regulation of mergers and acquisitions, it focused more on traditional markets and was not fully equipped to handle the complexities associated with digital platforms. Most provisions in the Act, especially Section 3⁵ on anti-competitive agreements and Section 4⁶ on the abuse of dominant positions, were effective in regulating traditional markets, but they lacked the specificity to deal with digital market dynamics, such as data-driven market power.

In contrast, the Draft Bill enlarges the scope of regulation by including problems peculiar to the digital economy. One of the many innovations of the new bill is the introduction of the concept of Systemically Significant Digital Enterprises (SSDEs). While the 2002 Act essentially relied on traditional thresholds of financial or user-based market size to determine questions of market dominance, the 2024 Bill places discretionary powers

² Legal text (2024) *General Data Protection Regulation (GDPR)*, <https://gdpr-info.eu/>. (last visited Aug. 7, 2024).

³ *A Study of the Growth of Digital Marketing in Indian*, Pramana Research Journal, <https://www.pramanaresearch.org/gallery/prj-p459.pdf> (last visited Aug. 8, 2024).

⁴ The Competition Act, 2002, No. 12, Acts of Parliament, 2002 (India)

⁵ The Competition Act, 2002, § 3, No. 12, Acts of Parliament, 2002 (India)

⁶ The Competition Act, 2002, § 4, No. 12, Acts of Parliament, 2002 (India)

with the Competition Commission in designating an enterprise an SSDE if that enterprise had elements of market integration, network effects, or data-driven advantages. This ensures that arising digital monopolies would face scrutiny before they hold sway over the market.

While the 2002 Act⁷ and its 2023 amendment⁸ do not address SSDEs' conduct per se on self-preferencing and anti-steering practices or unfair use of data, the Draft Bill fills this lacuna. This comes as an important change, as this would prevent big digital companies from taking steps that are detrimental to small competitors in the market dynamics. It is for this reason that the 2024 Bill covers the issue of data use, which has been a major omission in the Former Act, of 2002, by regulating the ways in which SSDEs can leverage data to maintain or extend their market power. This is in line with global trends in the regulation of digital competition and is an absolute necessity for the protection of consumer interests.

Defining Market Power: Criteria For SSDE Designation

The Draft Bill introduces the concept of Significant Strategic Digital Entities (SSDEs) as an important regulatory tool. Section 3 of the Bill⁹ provides for an enterprise to be notified as an SSDE if it has a substantial presence in India in relation to a Core Digital Service. Such presence shall be assessed, primarily by a combination of financial and user-based thresholds, which are set as threshold criteria for such notification. Accordingly, the Draft defined Core Digital Services (CDS) as essential digital platforms pivotal for the purposes of functioning digital markets, including search engines, online social media and cloud computing services. The bill proposes specific obligations for the CDS provider regarding the protection of fair competition, including data use restrictions as well as anti-steering provisions. This is done in an effort to create an environment where there is fair and competitive digitization.

Impact on Startups: Navigating Compliance and Growth

Increased Compliance Burden

Startups could face a significant compliance burden due to the SSDE designation, including reporting requirements, conduct rules, and potential Competition Commission of India's (CCI) investigations. While manageable for large enterprises, these costs could strain startups, especially those close

⁷ Supra at 129.

⁸ The competition (amendment) act, 2023, (2023).

⁹ Draft digital competition bill, 2024, § 3 (2024).

to the SSDE threshold.¹⁰ For any early-stage startup, this diversion from productive resources could prove very dangerous because it is at a stage in its life cycle where it has less financial and human capacity. This may damage its development at a rather critical juncture.

Economically, this can be explained with the concept of economies of scale. Large digital firms very often reap economies of scale that enable them to diffuse fixed costs, including compliance-related costs of regulation, over a greater operational base. For startups, usually working on quite small scales and narrower margins, the per-unit cost of compliance can thus turn inordinately high, thereby reducing their competitiveness.

Barriers to Scaling

In particular, the SSDE designation criteria, especially financial and user-based thresholds, are likely to retard startups' ability for scaling rapidly, due to the discouragement of growth in order to avoid regulatory burdens. Anti-circumvention provisions under the Bill further shrink a startup's discretion in structuring its operations optimally, leading to less preferred growth strategies.

Contestable market theory¹¹, which suggests that markets are competitive when there are low barriers to entry and exit, highlights the potential risk that the SSDE designation could raise barriers to market entry. Startups may become hesitant to expand aggressively, fearing that crossing the threshold for SSDE designation could expose them to stringent regulatory scrutiny and compliance costs.

Impact on Innovation

Innovation, one of the prime drivers of economic growth in the digital economy, is often stimulated by startups through the process of Schumpeterian creative destruction. So termed by the economist Joseph Schumpeter, it is a process wherein new innovations interrupt the established market structures, which sooner or later lead to increased economic progress. For instance, from 2014 to 2017, the communication equipment sector was highly concentrated, with the top four firms (C4 ratio) holding 78% of the market share and the Herfindahl-Hirschman Index (HHI) figures at 2441 (assets) and 3655

¹⁰ Supporting Investment in Knowledge Capital, Growth and Innovation, Organisation for Economic Co-operation and Development, 12-15 (2013), https://www.oecd-ilibrary.org/governance/oecd-regulatory-compliance-cost-assessment-guidance_9789264209657-en (last visited Aug. 7, 2024).

¹¹ Stephen Martin, *The Theory of Contestable Markets*, (2000) https://www.researchgate.net/publication/228432634_The_theory_of_contestable_markets. (last visited Aug. 8, 2024).

(sales).¹² Major players included Samsung India, Nokia Solutions, and Bharat Dynamics. The CCI's regulatory actions initially increased concentration but later slowed the rate of increase. By 2017, concentration growth was minimal, creating a more level playing field for new startups and enhancing Schumpeterian competition by allowing them to challenge established firms.

Here, the Draft Bill could have mixed implications. On one hand, the bill's stringent regulations on SSDEs aim to prevent monopolistic practices and ensure a level playing field, which could benefit startups by reducing barriers to entry and allowing them to compete more fairly.¹³ On the other hand, for startups that have been thriving due to their agility and capability to take risks, the potential regulatory hurdles and compliance costs thwarted by the bill may be a big deterrent. That process could be stifled by the regulatory framework enshrining SSDEs through uncertainty and disincentivizing startups from initially pursuing disruptive innovations.

Competitive Disadvantage

The compliance costs and regulatory burden can be more readily absorbed by larger entities that already benefit from substantial market power. The SSDE tag may create much higher scrutiny of mergers and acquisitions involving startups. Big digital platforms could get warier of acquiring or partnering with startups in order to not undergo regulatory pressures; in doing so, they would limit the exit opportunities for startups whose way to growth and market expansion lies in acquisitions.¹⁴ On the other hand, startups that do not command such market power and economies of scale may struggle to compete on a level playing field.¹⁵

Enhancing Fair Competition: An Analysis

The benefits that the draft bill proposes are in terms of new laws that would guide the Indian competition law sphere. Improvement in fair competition and consumer protection is placed at the forefront of the

¹² Beena Saraswathy, *Economic Reforms and Market Competition in India: An Assessment*, (Dec. 2019) 15-17 (Indian Council of Social Science Research (ICSSR), New Delhi; Institute for Studies in Industrial Development,), <https://isid.org.in/wp-content/uploads/2022/07/WP216.pdf>. (last visited Aug.7, 2024).

¹³ Philippe Aghion & Peter Howitt, *A Model of Growth Through Creative Destruction* 323-351 (1992), available at <https://dash.harvard.edu/handle/1/12490578> (last visited Aug. 8, 2024).

¹⁴ PwC, *Global M&A Industry Trends in 2023*, PwC Global, <https://www.pwc.com/gx/en/services/deals/trends.html> (last visited Aug. 5, 2024).

¹⁵ Hal R. Varian, *Intermediate Microeconomics: A Modern Approach* 1-18 (9th ed. 2000), https://www.academia.edu/38113085/Intermediate_Microeconomics_A_Modern_Approach_Ninth_Edition. (last visited Aug. 6, 2024).

Draft Bill when it makes provisions for important legislation for SSDEs and their subsidiaries. Compliance requirements are mandated in the form of strict adherence, including anti-circumvention procedures and stringent reporting requirements. This creates a level playing field in the market by making unethical use of data and self-preferencing illegal and ensures fair play between third-party applications.

The Commission's discretionary powers are crucial for regulating enterprises that significantly impact the digital economy, even if they do not strictly meet the set thresholds. This will ensure that no potentially dominant entity falls outside the realm of control due to financial or user-based criteria alone, considering parameters like commerce volume and user base.

Market Entry and the Innovation Theory of Profit

The potential for SSDE designation could independently impact market entry dynamics through the innovation theory of profit, wherein firms earn economic profits by innovating and outperforming their rivals. So, entering startups might find themselves in conditions where the most powerful digital platforms face very strict regulation, resulting in a risk-averse situation for the market environment.¹⁶

On the other hand, should regulation restrain anti-competitive practices without scaring innovation away, it could become a new market entrance opportunity and a source of growth for startup businesses.

Market Dynamics and Competition In Digital Market

The duel between local marketers against international tech companies creates a different dynamic as they set the tone of the Indian digital space and breed a different aggressive ecosystem. Despite the presence of global IT giants, there exists a considerable market share of Indian business houses in some crucial online segments. In the web grocery class, Indian agencies, Flipkart and JioMart, account for 9% and 20% of the e-commerce enterprise. When it comes to virtual bills, PayTM and PhonePe homegrown players have 40% and 35% shares respectively, much above the Google Pay 15% stake.¹⁷

As stated by Statista, in 2023, WhatsApp had 485m+ customers in India, and thus, it was the leading application. This indicates the effect of

¹⁶ Kenneth Arrow, *Economic Welfare and the Allocation of Resources for Invention*, in *The Rate and Direction of Inventive Activity: Economic and Social Factors* 609, 609-26 (Princeton Univ. Press 1962), <http://www.nber.org/chapters/c2144> (last visited Aug. 6, 2024).

¹⁷ Indian Unicorn Landscape - Startups, Growth, FDI, Investors, *Indian Unicorn Landscape - Startups, Growth, FDI, Investors*, <https://www.investindia.gov.in/indian-unicorn-landscape> (last visited Aug. 8, 2024).

community forces, which pulled on close competitor Hike to falter in 2021. Overseas direct investment (FDI) policies have affected the core e-trade organisations, for example, Amazon and Walmart-owned Flipkart business but also introduced opportunities for Indian startups, for instance, Meesho and Udaan. This brings out the challenge that choice-makers have to strike so as to attract overseas capital while encouraging home innovation. In this context, satisfaction requires not only the generation of new technology but also the capability to deal with complex regulations.

Comparative Analysis: Global Approaches To Digital Market Regulation

The global digital market regulation landscape offers some lessons for India's evolving regulatory framework, particularly from the EU and US markets.¹⁸ The EU has been a pioneer in digital market regulation through its Digital Markets Act (DMA) and Digital Services Act (DSA) which focuses on systematic market power regulation. The US has relied more on traditional antitrust laws to address digital competition concerns. While the Draft Bill draws from both models, especially the EU's approach to identifying significant market power, it takes a different route by focusing on protecting and nurturing Indian companies. This is evident in data localisation requirements and restrictions on foreign companies on e-commerce platforms.¹⁹ India's approach is unique in its balance between market control and investment attraction so a phased implementation is required. For startups it could be graduated compliance starting with basic data protection and optional data localisation. For established entities it would be more comprehensive obligations including mandatory algorithmic transparency and regular market power assessment. The framework should have clear enforcement mechanism with tiered penalty structure based on company size and violation severity and streamlined approval process for non-sensitive sectors to keep foreign investment attractive.

To make it effective the implementation should be supported by a strong institutional framework, possibly a dedicated Digital Markets Unit within the Competition Commission of India.²⁰ This unit would monitor

¹⁸ S.1260 - 117th Congress (2021-2022): United States Innovation and Competition Act of 2021, *Congress.gov*, <https://www.congress.gov/bill/117th-congress/senate-bill>, (last visited Aug. 7, 2024).

¹⁹ Digital Markets Act (2021), *Digital Markets Act (DMA)*, https://digital-markets-act.ec.europa.eu/index_en (last visited Aug. 7, 2024).

²⁰ Report of the Committee on Digital Competition Law, <https://www.mca.gov.in/bin/dms/getdocument?mds=gzGtvSkE3zIVhAuBe2pbow%253D%253D&type=open> (last visited Aug. 7, 2024).

compliance, provide technical guidance and ensure alignment with broader digital economy initiatives like Digital India. Additional support mechanisms could be R&D tax incentives for Indian companies, patent fast tracking for digital innovations and specific provisions for local language content and rural digital inclusion. Through this customized approach India can create a regulatory framework that learns from global best practices and addresses its unique market and development needs.

Moving Towards Balanced Regulation and Innovation: Policy Recommendations

A realistic view helps start-ups focus on growth while gradually adopting more extensive laws as they evolve into firms. This may be offset by the “regulatory sandbox” program which allows new industries to develop ideas where they can remain liable for the whole regulatory cost from the very beginning.

It should be to use major platforms’ inducements to give access to aggregated, non-identifiable data for level playing the field. Most of the technological enhancements are enhancing themselves at the highest rate, which is why to keep up with these changes, it is advisable to have regular evaluations and interactions with the different stakeholders involved in the process of technological enhancement. It would be helpful to improve the regulations by annually assembling academics and industry specialists in roundtable meetings.

“In February 2021, Japan enacted the Act on Improving Transparency and Fairness of Digital Platforms, to improve transparency and fairness in transactions, noting that the regulations should not interfere with digital innovation. The Act requires digital platforms to disclose relevant information, including their terms and conditions, and pre-notify when any changes are made to ensure the fairness of transactions or to settle disputes with users. The Minister reviews the reports, discloses evaluation results and has the authority to issue recommendations if there is any suspicion of a violation of the competition law, then it is referred to the Japan Fair Trade Commission.”²¹ These provisions can be incorporated into the proposed digital bill in India to enhance its effectiveness and benefit all stakeholders. All these actions should be done very prudently with consideration of the unique Indian digital ecosystem at any given time. The right objective should therefore be the creation of a context that eliminates pathologies and fosters

²¹ *Competition law, policy and regulation in the digital era*, (Apr. 28, 2021), https://www.unctad.org/system/files/official-document/cicld57_en.pdf. (last visited Aug. 7, 2024).

domestic ingenuity. With this comprehensive, future-oriented approach, we can guarantee that despite the fast growth, India's digital economy remains rich, open, and competitive.

The concept of dynamic efficiency can be used to make a long-term analysis of the SSDE designation's impact on the startup ecosystem. Dynamic efficiency is held to be the capability of an economy to improve its efficiency over time through innovation and technological progress. The overall success of the Draft Bill in building a well-balanced digital ecosystem will depend on how far it encourages dynamic efficiency by promoting innovation and reducing market dominance by a few large players. That will be a properly calibrated regulatory approach aimed at promoting innovation while curtailing anti-competitive practices.

The European Union's General Data Protection Regulation²² experience could be very instrumental in the present context. Although GDPR had the objective to protect consumer data and ensure fair competition, it introduced significant compliance costs mainly for the smaller companies, which reduced innovation. On the other hand, this regulation fueled innovation that provided solutions compliant with GDPR, showing that a well-designed regulation is capable of posing challenges while at the same time creating new opportunities. Similarly, the Draft Bill is likely to affect how startups behave towards changing regulation, whose ultimate success lies in its balance between innovating and checking anti-competitive practices.

Conclusion

While the bill aims to curb monopolistic practices and protect consumer interests, it also raises concerns about potential regulatory burdens on emerging digital enterprises. This balance between innovation and rigorous application of competition rules is quite delicate and requires assessment of the long-term effect of the bill on the growth and sustainability of startups in the digital ecosystem. To sustain its relevance in a context that is rapidly digital, it is necessary to apply constant appraisals and communication with stakeholders. If properly implemented, this law can instigate a fresh round of digitization in India to create conditions that would allow for the growth of both startups and other types of enterprises. The Draft Digital Competition Bill 2024, in other words, is not just a legislation, but the affirmation of India's digital intentions.

²² C. J. Hoofnagle, B. van der Sloot & F. Z. Borgesius, *The European Union General Data Protection Regulation: What It Is and What It Means*, 28 INFO. & COMM. TECH. L. 65, 65-98 (2019), <https://doi.org/10.1080/13600834.2019.1573501> (last visited Aug. 9, 2024).

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Balancing Innovation and Regulation: The Impact of Digital Competition Bill, 2023 on Indian Startups

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Introduction

Transitioning from traditional to digital antitrust frameworks unlocks unprecedented opportunities; however, it simultaneously poses a lot of challenges as well. Large digital startups¹ are increasingly engaging in unfair trade practices^{2 3 4 5}. This has led to a global recalibration of novel regulatory approaches to address the potential of rampant anti-competitive practices in such realms, given their unique characteristics. India, with its nascent yet burgeoning digital landscape, has witnessed an alarming rise in digital enterprises abusing their dominant position through anti-competitive

¹ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

² Angelique Chrisafis, *Google fined €250m in France for breaching intellectual property deal*, THE GUARDIAN, (Mar. 20, 2024, 11:21 AM), <https://www.theguardian.com/technology/2024/mar/20/google-fined-250m-euros-in-france-for-breaching-intellectual-property-rules>.

³ Special Correspondent, *Define unfair trade practice for e-com*, THE HINDU (Mar. 24, 2021, 10:41 PM) <https://www.thehindu.com/business/define-unfair-trade-practice-for-e-com/article34154056.ece>

⁴ Business Today Desk, *Government warns Ed-tech companies against unfair trade 193 practices*, BUSINESS TODAY (Jul. 1, 2022, 5:55 PM), <https://www.businesstoday.in/latest/corporate/story/government-warns-ed-tech-companiesagainst-unfair-trade-practices-340028-2022-07-01>;

⁵ Gireesh Chandra Prasad, *Ola, Uber CCPA notices for ‘unfair trade practices’*, LIVEMINT (May 20, 2022, 05:41 AM), <https://www.livemint.com/news/india/central-consumer-protection-authority-issues-noticesagainst-ola-uber-for-unfair-practices-11653058167113.html>.

practices.⁶ This can be evinced by the findings of the 53rd Report on Anti-Competitive Practices by Big Tech Companies.⁷ The report highlighted the sharp rise in digital market growth due to digitalization and strong network effects that favour dominant digital companies example Rise of News Media in India⁸

India's thriving start-up ecosystem, which boosted initiatives like the Atal Innovation Mission and the Start-up India Initiative, becomes particularly vulnerable. Given the unfair trade practices by large digital enterprises, startups would struggle to compete in such a slit-throat environment. This would deter startups from taking risks and investing in innovation. If this trend is left unchecked, it would stagnate market growth and India's hard-earned reputation as a start-up hub.

The pressing urgency of this issue catalysed global response, particularly the groundbreaking Digital Markets Act of the European Union.⁹ This legislation was brought to transform the digital landscape by making the internet more competitive and user-friendly. It sought to boost innovation, increase competition,¹⁰ improve quality, and regulate prices by curtailing the big tech giants abuse of their dominant position in the market.¹¹

In response to these developments, the Indian government constituted a Committee on Digital Competition Committee to review the Competition Act, 2002; in the context of the digital realms. The findings of the committee materialized into a report including the Draft Digital Competition Bill, which

⁶ Manish Singh, *Amazon to delist top seller Appario on India Marketplace amid regulatory heat*, TECHCRUNCH (Oct. 31, 2022, 05:14 AM), <https://techcrunch.com/2022/10/31/amazon-to-delist-top-seller-appario-on-india-marketplace-amid-regulatory-heat/>.

⁷ Standing Committee on Finance, Seventeenth Lok Sabha, Ministry of Corporate Affairs, *Anti-Competitive Practices by Big Tech Companies, Fifty Third Report* (2022).

⁸ Safiullah, M. (2019). *Prime time news coverage and electoral harvest-a study of 2014 Indian general election*. International Journal of Business Forecasting and Marketing Intelligence, 5(4), 424-432.

⁹ Regulation (EU) 2022/1925 of the European Parliament and of the Council on Contestable and Fair Markets in the Digital Sector (Digital Markets Act), O.J. L 265/1 (2022).

¹⁰ *Digital Markets Act: Ensuring Fair and Open Digital Markets*, EUROPEAN COMMISSION (2024), https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/digital-markets-act-ensuring-fair-and-open-digital-markets_en.

¹¹ *Digital Markets Act: rules for digital gatekeepers to ensure open markets enter into force*, EUROPEAN COMMISSION (Oct. 31, 2022), https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6423.

draws principles from its European Union counterpart¹² after extensively studying international digital markets.¹³

While this legislation aims to capture big tech giants and establish lawful measures to ensure both certainty and flexibility in regulating digital markets, the bill has also faced opposition. Concerns have emerged that it contains ambiguous definitions, vaguely drafted provisions, and irrational thresholds. This may inadvertently trap small businesses and startups—the very entities it seeks to protect. This overreach could defeat the intended purpose of the bill of ensuring a healthy competition in the digital market.

Varied Context For Implementation: Digital Markets Act V Draft Digital Competition Bill

The Digital Competition Bill emulates a lot of aspects of the Digital Markets Act. The Digital Competition Bill aims to regulate powerful tech companies that dominate the digital market and have the ability to influence the same. The term used for these companies is Systemically Significant Digital Enterprises. Similarly, in the Digital Markets Act, such companies are known as “Gatekeepers”. Both legislations have put forward quantitative thresholds to designate companies as Systemically Significant Digital Enterprises or Gatekeepers. Both Digital Competition Bill and Digital Markets Act identify certain services as Core Digital Services and Core Platform Services and aim to regulate these services offered by entities. Both frameworks aim to prevent anti-competitive practices under the identified services by pre-emptively (ex-ante) preventing large platforms from engaging in such conduct.¹⁴

It can be said that the Digital Competition Bill is highly inspired by Digital Markets Act. However, many authors have termed that a Digital Markets Act- like approach is not suitable for developing economies like India.¹⁵ Both Digital Competition Bill and Digital Markets Act are meant

¹² Sarthak Sahoo, *Tailoring the Ex-Ante Tides: Analysing the Digital Competition Bill & Digital Markets Act*, CENTRE FOR BUSINESS AND FINANCIAL LAWS (Apr. 20, 2024), <https://www.cbflnldelhi.in/post/tailoring-the-ex-ante-tides-analysing-the-digital-competition-bill-digital-markets-act>.

¹³ Report of The Committee on Digital Competition Law, Ministry of Corporate Affairs, Government of India (February 27, 2024), <https://www.mca.gov.in/bin/dms/getdocument?mds=gzGtvSkE3zIVhAuBe2pbow%253D%253D&type=open>.

¹⁴ Simone Lobo, *MeitY proposes exclusion of Preemptive measures from draft digital competition bill: Report*, MEDIANAMA (Jul. 15, 2024), <https://www.medianama.com/2024/07/223-meity-propose-mca-removing-ex-ante-digital-competition-bill/>.

¹⁵ Geoffrey A Manne, *European Union's Digital Markets Act not suitable for developing economies, including India*, THE TIMES OF INDIA (February 14, 2023), <https://timesofindia.indiatimes.com/blogs/voices/european-unions-digital-markets-act-not-suitable-for-developing-economies-including-india/>.

to regulate different jurisdictions. The European Union has a more mature digital market as compared to that of India. The total number of unicorns in the European Union has grown 88% since 2014¹⁶ ¹⁷, which is larger than that of the United States of America. Additionally, it also produces more founders of tech start-ups than that of the United States of America. The Digital Markets Act was drafted so as to pay heed to the European Union's strengths and weaknesses. It might not be the case that India has the same needs as Europe. India has shown significant strides in terms of growth and attracting investments. However, it still stands behind its peers, i.e., the United States of America, European Union, China etc. India's digital economy being at a nascent stage, it is essential for it to attract investments and knowledge/skills related to specific industry so as to sustain innovation ¹⁸. A "copy-paste approach" like Digital Markets Act will only act as a hurdle for India's growing start-up culture and initiatives such as *Viksit Bharat*.

Additionally, it becomes pertinent to observe that the European Union has been at the forefront of technological advancement with efficiently enacting regulatory frameworks for fostering ethical and user-centric practices. This is evidenced by the implementation of the General Data Protection Regulation, the Digital Service Act, the EU's AI Act, and the Digital Markets Act as the centrepieces for the European Digital Strategy. This has been complemented by the abundant discourse prevalent in the European Union pertaining to research and innovation under the Horizon Europe Programme as outlined in the Open Europe Report of 2019.¹⁹ However, on the contrary, the Indian digital landscape is still evolving and long way ahead of us. This nascent growth has further been acknowledged in the Report of the Committee on Digital Competition Committee.²⁰ In the same framework, emulating a law

¹⁶ Credane, European Tech Ascendancy Unlocking a Continent's Innovation Potential (2023).

¹⁷ Julius Gabel Norgaard, *The US Innovates, The EU Regulates: How Can The EU Change This Narrative?* FORBES (August 27, 2024), < [https://www.forbes.com/councils/forbesagencycouncil/2024/08/27/the-us-innovates-the-eu-regulates-how-can-the-eu-change-this-narrative/#:~:text=A%20recent%20report%20by%20Creandum,%20progress%20is%20still%20noteworthy.](https://www.forbes.com/councils/forbesagencycouncil/2024/08/27/the-us-innovates-the-eu-regulates-how-can-the-eu-change-this-narrative/#:~:text=A%20recent%20report%20by%20Creandum,%20progress%20is%20still%20noteworthy.>)

¹⁸ Lazar Radic, *India Should Question Europe's Digital-Regulation Strategy*, TRUTH ON THE MARKET (April 12, 2024), <https://truthonthemarket.com/2024/04/12/india-should-question-europe-s-digital-regulation-strategy/>.

¹⁹ *Open European Union Report on Policies, Reforms, and Achievements in EU Science and Innovation*, EUROPEAN COMMISSION (2014-2019) <https://op.europa.eu/en/publication-detail/-/publication/0dc27be9-de75-11e9-9c4e-01aa75ed71a1/language-en/format-PDF/source-131716319>.

²⁰ Report of The Committee On Digital Competition Law, Ministry Of Corporate Affairs, Government of India, ¶1.5 (February 27, 2024), <https://www.mca.gov.in/bin/dms/getdocument?mds=gzGtvSkE3zIVhAuBe2pbow%253D%253D&type=open>.

that is regulating a domain much more varied and advanced compared to us might result in desired consequences and may have adverse ramifications.

From the perspective of start-ups and small and medium enterprises (“SMEs”), the DIGI Digital Markets Act opens floodgates of opportunities. Eoghan O’Neil, Senior Policy Officer in the European Commission Platform Policy and Enforcement Directorate, when asked about how the Digital Markets Act would impact these entities, astutely highlighted that they can incentivize the Digital Markets Act to their benefit. Given the massive obligations imposed on the gatekeepers, they now have the opportunity to succinctly and pragmatically identify market opportunities and reconfigure their offerings accordingly.²¹ Reuters data released in April 2024 also shows promising results, as it observes the deviation of users from market giants like Chrome and Safari and the growth in the user base of independent entities like Aloha and Brave.²²

The Indian response to Digital Competition Bill has been quite a mixed bag. There are two divisions, the first which opposes the Digital Competition Bill. The fundamental reasoning provided is the lack of Indian market understanding. The Digital Competition Bill sounds like piecemeal legislation conceptually; however, on the litmus of practicality, it only seeks to identify and implement obligations on big techs, but it neglects the synergies between these big players and startups and small and medium enterprises.²³ Once heavy compliances are imposed on big tech giants, the ease of investment will be hampered, which will impact the start-ups particularly, as they will come to a standstill when the funds run dry.²⁴ The other contentions are raised regarding vague definitions and irregular thresholds that are not to the Indian market size and dynamics and might sweep startups within its ambit as well. The other side of the spectrum celebrates the bill as progressive

²¹ Eoghan O’Neil, *Digital Markets Act: The Opportunities for European Startups*, IIEA (Mar. 26, 2024), https://youtu.be/r5_ulcUy5Y8?si=e_yb2ZRTNiYnljPZ

²² Supantha Mukherjee Foo Yun Chee, *EU’s new tech laws are working: small browsers gain market share*, REUTERS (Apr. 10, 2024), <https://www.reuters.com/technology/eus-new-tech-laws-are-working-small-browsers-gain-market-share-2024-04-10/> (last visited on August 11, 2024)

²³ Palak Agarwal, *Digital Competition Bill, a threat to MSMEs: India SME Forum*, YOURSTORY (Apr. 12 2024,), <https://yourstory.com/smbstory/digital-competition-bill-threat-to-msmes-india-sme-forum> .

²⁴ Aditi Agrawal, *Stakeholders continue to oppose Digital Competition Bill at meet*, HINDUSTAN TIMES (Jun. 20, 2024), <https://www.hindustantimes.com/india-news/stakeholders-continue-to-oppose-digital-competition-bill-at-meet-101718825708495.html>

legislation that addresses monopolistic practices of big tech asphyxiating startups by stifling innovation and restricting consumer behaviour.²⁵

Startups V. Digital Competition Bill: Striking The Perfect Balance

The Indian start-up ecosystem has witnessed significant growth, solidifying itself as the third biggest tech startup hub globally. The entrepreneurial sector in the country is thriving, with more than 950 tech startups founded in the past year alone.²⁶ The substantial financial support received by the sector further demonstrates the surge in innovation, with cumulative funding exceeding \$70 billion for over 31,000 startups from 2019 to 2023. Even amidst the pandemic, when business came to a standstill, startups increased their workforce by 14% in 2020 compared to 2019.²⁷

The Indian government has played a pivotal role in nurturing the burgeoning startup ecosystem by implementing various supportive measures. These measures were introduced to promote innovation and entrepreneurship within the framework of the Atmanirbhar Bharat Abhiyan. Prominent initiatives include the Atal Innovation Mission with the goal of fostering innovation in specific economic areas, the Startup India Seed Funding Scheme offering vital initial funding to startups, and the Startup India Initiative, providing a complete platform for startup advancement.

Nevertheless, some aspects of the Digital Competition Bill have sparked tensions among stakeholders in the startup ecosystem, despite the potential for unprecedented progress. The current language creates enough room for varied interpretations, potentially capturing startups because of unclear provisions. This could impede the growth of startups if these concerns are left unaddressed.

Irregular thresholds under Clause 3

Concerns have been raised against the financial and user thresholds outlined in Clause 3 of the Digital Competition Bill for the designation of a Core

²⁵ Kamya Pandey, *40 Indian Startups sign a letter supporting the draft Digital Competition Bill*, MEDIANAMA (May 17, 2024), <https://www.medianama.com/2024/05/223-40-indian-startups-sign-a-letter-supporting-the-draft-digital-competition-bill/>.

²⁶ IANS, *Despite challenges, India saw birth of over 950 tech startups last year: Report*, ECONOMIC TIMES (Jan. 04, 2024), <https://economictimes.indiatimes.com/tech/startups/despite-challenges-india-saw-birth-of-over-950-tech-startups-last-year-report/articleshow/106546472.cms?from=mdr>.

²⁷ Sindhu Hariharan, *Startup jobs grew 14% during the pandemic year: government data*, THE TIMES OF INDIA (February 12, 2021), <https://timesofindia.indiatimes.com/business/india-business/startup-jobs-grew-14-during-the-pandemic-year-govt-data/articleshow/80840814.cms>.

Digital Services as an SSDE. The provision envisages the following criteria for the determination of an SSDE, obligating an entity to comply with the Bill; given they fall under any of these thresholds.

1. turnover in India of ₹4000 crore or more;
2. global turnover of \$30 billion or 2.5 lakh crore or more;
3. gross merchandise value in India of ₹16000 crore (~\$ 1.9 billion) or more;
4. Global market capitalization exceeds USD \$ 75 billion or 6.2 lakh crore.
5. Hosting around 10 million end users or 10,000 business users.

These thresholds have drawn concerns, particularly regarding their potential impact on the startups. Critics have averred that the proposed provision may inadvertently engulf startups within its ambit as well while capturing big tech. At this juncture, the end user threshold becomes the key point of contention. Given India's large population, with around 820 million as of 2024,²⁸ the proposed threshold of 1 crore would sweep even those digital platforms that are used by every 1 in 80 active internet users in India. Resultantly, this would disproportionately fail to accurately capture the scale of big tech companies. Delving into the concerns it raises, primarily low thresholds risk capturing smaller enterprises in the regulatory net. Such categorization would engulf many Indian startups, as mentioned below in the table.

S. No.	Startup	User-base (million)
1.	CRED	13
2.	MX Player	300
3.	Paytm	90
4.	Car Dekho	62
5.	Dream 11	55
6.	Policy Bazaar	48
7.	Blinkit	20

It is evident from the table that numerous nascent startups that are in the process of building their products and attracting users may still be classified as SSDEs under the proposed regime. This classification could result in obligating them to the same compliances and oversight as big tech giants. Startups are already struggling to navigate a complicated market landscape influenced by dominant tech giants who have held strong market positions

²⁸ Annapurna Roy, *How India is using the Internet*, ECONOMIC TIMES, (March 10, 2024), <https://economictimes.indiatimes.com/industry/healthcare/biotech/healthcare/shedding-light-on-weight-loss-struggle-s-among-diabetics/articleshow/110589064.cms>.

for a long time. Having been placed on the same pedestal as the market giants could severely impact their ability to grow and compete.

Additionally, the need to reassess the threshold for business users is highlighted, given that numerous startups currently surpass the suggested cap of 10,000 business users. This insufficient threshold does not differentiate between new players and established market leaders. Furthermore, the definition of the term user base does not incorporate active users. There might be a situation where the user is just engaging with the platform and not actively doing transactions.

Tying and bundling under Clause 15

Tying refers to a practice where the seller of product A requires its customers to buy a separate product B (tied product) along with A. The product B can also be sold separately by the seller. Whereas Bundling refers to the practice of selling the products in bundle i.e., in a package ²⁹. The basic difference between these two is that in tying, the seller can also sell the product B separately.

Clause 15 of the Digital Competition Bill restricts SSDEs from providing other products or services along with the usual Core Digital Services ³⁰. As per this clause, players and start-ups such as Swiggy and Paytm have to unbundle their services. Many have argued that such requirements will degrade the existing seamless user experience provided by these platforms.³¹ Such a restriction may lead to a decrease in user engagement and may dilute the consumer base of the platform. As per the report by CIRC³², any user using Paytm has to log in multiple times to use its multiple services. For example, one has to log in and enter in their credentials while using Paytm's payment services. However, if one wants to book flight tickets through Paytm, they again have to log into the app. This user engagement is starkly different from what Paytm offers currently, i.e., only one time login and access to multiple services.

²⁹ The Unilateral Conduct Working Group, Unilateral Conduct Working Book Chapter 6: Tying and Bundling (International Competition Network 2015).

³⁰ The Digital Competition Bill, 2023, Clause 15.

³¹ Ashutosh Mishra, Digital Competition Bill may impact user experience on online platforms, BUSINESS STANDARD (July 01, 2024), https://www.business-standard.com/industry/news/digital-competition-bill-may-impact-user-experience-on-online-platforms-124070100885_1.html.

³² CUTS Institute for Regulation & Competition, *Digital Competition Bill and its potential impact on the consumers of India*, CIRC (May, 2024), https://www.circ.in/pdf/Digital_competition_bill_2024_and_its_potential_impact_on_consumers_in_india.pdf.

Similarly, another example is Swiggy, a popular food delivery startup. Swiggy, along with its usual service of delivering food, also offers services such as Swiggy Super i.e., (a subscription plan that offers free delivery, discounts and parcel delivery). This bundling of services incentivizes users to get a comprehensive benefit of the package in one go. Clause 15 of the Digital Competition Bill would restrict Swiggy from providing the bundled service, which might affect the user experience.

Way Forward

The Competition Act, 2002 was enforced so as to promote and sustain competition in the market. It was never meant to regulate specific entities. However, the object of the proposed Digital Competition Bill is to regulate specific entities. Additionally, as already stated above, the problematic provisions of Digital Competition Bill such as quantitative thresholds and the discretionary powers given to CCI to designate an entity as SSDE will cause chilling effects on startups and hinder their capacity to innovate.

The Schedule 1 of the Digital Competition Bill lists out the Core Digital Services.³³ However, the Committee on Digital Competition Committee report was silent on the rationale adopted to consider services as Core Digital Services. There is a need for reasoning behind the identification of Core Digital Services³⁴. Additionally, the quantitative threshold being uniform to all Core Digital Services may backfire since what is considered a significant user base may vary from service to service. Furthermore, the Digital Competition Bill prohibits various practices such as self-preferencing. However, Competition Commission of India, while investigating a self-preferencing case against Google, did find certain consumer benefits in such practices.³⁵

Due to the absence of extensive empirical data on the study of digital markets in India. The authors would suggest a detailed conduct of sector-specific market studies by Competition Commission of India appointed committee before implementing the Digital Competition Bill. Such conduct of market study is not new. Jurisdictions such as European Commission's "Sector Inquiry into E-Commerce" in 2015 and United Kingdom Competition

³³ The Digital Competition Bill, 2023, Schedule 1.

³⁴ Ministry of Corporate Affairs, Government of India, Report of the Committee on Digital Competition Law, (2024), <https://www.mca.gov.in/bin/dms/getdocument?mds=gzGtvSkE3zIVhAuBe2pbow%253D%253D&type=open>.

³⁵ Geoffrey A. Manne, *Google's India case and a return to consumer-focused antitrust*, Truth on The Market (February 08, 2018), <https://truthonthemarket.com/2018/02/08/return-to-consumer-focused-antitrust-in-india/>.

and Market Authority's market study in 2019 have previously conducted market study for their respected digital market laws.

The proposed sector-specific market study will have following benefits:- *Firstly*, such a market study will help in determining the complex digital markets, the relevant players involved in it, and their interaction with consumers and small businesses. *Secondly*, it would also contribute to identifying the relevant threshold needed to designate any entity as a Systemically Significant Digital Enterprises. *Thirdly*, it would contribute to redefining the Digital Competition Bill and aligning it with the dynamic digital economy of India.

Nevertheless, to address the concern of the thresholds, firstly due consideration needs to be given to the European Union Digital Markets Act that follows a different approach targeting enterprises with a user base representing a significant portion (10%) of the population. This is done by placing the end user threshold at 45 million monthly active users, considering the European Union population to roughly be around 450 million. (448 million as of January 1, 2023).³⁶ Drawing from the framework, the threshold can be modified as per the Indian market dimensions. For modification purpose, the relevant data such as user metrics can be gathered by collaborating with industry stakeholders. Such exercise can be taken by the committee on the proposed market study. The authors are of the view to increase the threshold of the end-users to it to 7-8 crore (70-80 million) users, which would reflect 10% of the user base. Moreover, making similar adjustments to the business user threshold by raising it to 1 lakh users would also align with the intended scope of the proposed legislation.

Additionally, it is imperative to provide a clear definition of “active users”, specifying criteria such as unique logins, transactions, or time spent on the platform within a defined period. Such clarification would help in negating any double counting.

Furthermore, there is a pertinent need to strengthen existing infrastructure to deal with Digital Competition Bill. As per the Report of the Committee on Digital Competition Committee, one of the reasons to bring an ex-ante framework was due to delay in completion of proceedings against tech companies.³⁷ However, the report or the Digital Competition Bill does

³⁶ EUROSTAT, <https://ec.europa.eu/eurostat/databrowser/view/TPS00001/bookmark/table?lang=en&bookmarkId=6ef61f16-dadc-42b1-a6ce-3ddfd4727e8> (last visited on August 11, 2024).

³⁷ Ministry of Corporate Affairs, Government of India, Report of the Committee on Digital Competition Law, (2024), <https://www.mca.gov.in/bin/dms/getdocument?mds=gzGtvSkE3zIVhAuBe2pbow%253D%253D&type=open>.

not provide any solution to it. On implementation of Digital Competition Bill, the already clogged Competition Commission of India might face situations such as parallel proceedings going under both Digital Competition Bill and Competition Act, 2002. It is essential to improve the existing infrastructure of CCI so as to facilitate smoother implementation of Digital Competition Bill.

Conclusion

The proposed Digital Competition Bill and its ex-ante framework mark a significant shift from regulating competition to regulating specific entities operating in Digital Markets. The proposed framework takes inspiration from the European Union's Digital Markets Act, whose success remains uncontested. The objective of Digital Competition Bill is to regulate anti-competitive practices in digital markets by imposing pre-emptive measures on entities. While doing so, it might inadvertently stifle innovation and growth within India's burgeoning startup ecosystem. Various provisions such as quantitative thresholds, discretionary powers given to Competition Commission of India, restrictions on tying, bundling, self-preferencing and targeted advertising would cause a chilling effect on startups and will hinder their capacity to innovate and grow.

The Digital Competition Bill specifies a low quantitative user thresholds for an enterprise to be designated as a Systemically Significant Digital Enterprises. This may inadvertently cover startups thereby subjecting them to onerous compliances. Additionally, the bill borrows such provisions from the EU's Digital Markets Act. The digital market of India is at its nascent stage and unique in nature. A lot of local players and small businesses depend on Indian startups for their businesses. It is therefore, pertinent to conduct a detailed market study so as to tailor the Digital Competition Bill to India's specific needs, thereby protecting the interests of consumers and Indian startups.

A balanced approach is required when seeking to effectively police India's emerging new digital economy. Too much of regulation would discourage investment, as well as stifle the talent and innovation of the startups, while unchecked regulation gives monopolistic players more grounds on which to continue making their monopolistic moves. The creation of a framework that would hold big tech accountable while being equally supportive to startups, is much needed. Tailoring the Digital Competition Bill to India's unique market realities, with clearer thresholds and provisions, will ensure it achieves its dual objectives: that is, enhancing innovation and protecting competition.

Redefining Start-Up Financial Future with Next-Gen ICO Model

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Abstract: India has witnessed a burgeoning growth of start-ups beginning from 350 in 2014 to over 90,000 in 2023. Even after becoming the third largest start-up ecosystem in the world and having an array of government plans specifically curated for the growth of start-ups, the Indian entrepreneurial landscape presents a less-than-ideal picture wherein the start-ups are following a downward trajectory pertaining to the 2020-21 pandemic and the financial crackdowns in the major markets.

This research paper underway endeavours to scrutinize the different aspects of financial challenges in the start-up's ecosystem with special reference to governance, risks as well as internal and external challenges including the usage of different financial models at different developmental stages which leads to a zig-zag growth. In this scenario, the integration of the Initial Coin Offerings Model at a very early stage can yield better results both financially and operationally.

The authors have, thus, attempted to advance the discourse on integrating the ICO-funding model in the digitalized startups of the 20th century by examining venture capital dynamics, emphasizing regulatory disparities, and putting forth frameworks for token governance and cross-border regulatory compliance, backed by an unbiased analysis of ICO fundraising metrics derived from extensive data aggregation.

This paper presents suggestions to enhance the financial strength of start-ups by using the key elements of this digital world. The paper's long-term projections are envisioned to curb the operational and legislative issues embodied in this sector. The authors have delved into the legal frameworks governing ICOs in startups, excluding accounting standards, taxation regimes, and financial regulations. While confined to prevailing market dynamics and notwithstanding global volatility, it posits ICOs as a pragmatic model for India.

Keywords: Start-ups, Funding Models, Initial Coin Offerings, Legislations, Digitalization

Tokenizing Tomorrow: A Gateway to Future Startups

Startups, this catalyst of positive change has ignited a wave of innovation, creativity, global ambition, and determination amongst the tech-savvy youth of India, transforming India into the 3rd third-largest startup ecosystem¹ in the world with 1,44,506 DPIIT-recognized startups.² The rich demographic dividend backed by the favourable national as well as the state action plan has led to the creation of over 12.42 lakh employment opportunities in more than 56 sectors and spread over 80% of the districts across the nation.³ Surely, this meteoric rise and glittering figures must mean that we're on the brink of becoming the Silicon Valley of the East, right? Well, the reality is quite harsh.

These budding startups are grappling with the negative aftermaths of the COVID-19 pandemic along with the ongoing financial tremors and economic recessions around the global market.⁴ The present turmoil and studies have opened a pathway to rethink, redefine and redesign the funding models and other operational aspects of startups. The conventional funding models are giving a zig-zag growth trajectory but in this digital-technology-driven world, we can expect straight-line growth by incorporating some new tools of the digital era.

One of these tools could be Initial Coin Offerings (“ICO”) as the basis for the most waiting financial revolution of the 21st century. This new model will use some cutting-edge and comparatively safer technologies like Blockchain, Distributive ledger, etc., to guarantee the upward surge in the growth of these start-‘UPs’.

The Startup Revolution: ICO’s as the Catalyst for New Ventures

As per the reports of the World Bank, India is experiencing rapid economic growth. The recent report predicts that India would lead the way in terms of

¹ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

² START UP INDIA, <https://www.startupindia.gov.in/> (last visited Aug. 11, 2024).

³ PIB, <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2002100> (last visited Aug. 11, 2024).

⁴ Andreas Kuckertz, et al., *Startups in times of crisis – A rapid response to the COVID-19 pandemic*, JOURNAL OF BUSINESS VENTURING INSIGHTS 13 (2020), 2020.

GDP growth rate, with a projected rate of 6.6% for the financial year 2024-25.⁵ This positive economic outlook provides Indian startups with a significant advantage in contributing to the overall growth of the Indian economy. An ICO may be a more favourable choice for entrepreneurs seeking public funding for next-generation ventures in India, in contrast to the conventional approaches such as an Initial Public Offering (“IPO”) and Private Equity.

IPOs provide considerable difficulties for young startups, including the need to navigate regulatory hurdles and bear large costs such as underwriting fees, compliance fees, marketing expenses, and legal fees. These will impose a significant burden on a startup that is still not generating profits. Another issue occurs when the startup is required to reveal all of its data for scrutiny by the regulatory authority and the general public. As a fledgling startup, there is a greater risk of competitors accessing and then, using the data against the startup and their founders. Similarly, if a startup chooses to adopt a Next Generation ICO model, it will need to obtain approval for its Whitepaper and Business Plan from a regulatory authority in India. Once the regulatory compliances are verified, the startups will experience minimal interference from the government and will also save a significant amount of money on other expenses.

The current policies pertaining to ICO in countries such as the USA, UAE, and the European Union might serve as a valuable reference for policymakers in India. By adopting investor-friendly laws and ensuring a maximum degree of investor protection, India can create a favourable environment for ICOs. According to data from PWC, India has explicitly prohibited ICOs due to the risks associated with cryptocurrency, which is not a regulated currency.⁶ However, this ban has also resulted in the loss of potential profits that could have been generated through regulated Initial Coin Offerings with minimal government intervention.

Taiwan has recently implemented a self-regulatory regulation called the Taiwan Virtual Asset Service Provider (VASP) Association to promote the growth of the cryptocurrency sector.⁷ This law aims to minimize government intrusion and support the development of Fintech in the country. The VASP

⁵ DD News, <https://ddnews.gov.in/en/world-bank-raises-gdp-projection-says-india-to-keep-its-fastest-growing-economy> tag/#:~:text=%E2%80%9CIndia's%20economy%20has%20been%20buoyed,the%20World%20Bank%20report%20stated

⁶ PWC, <https://www.pwc.ch/en/industry-sectors/financial-services/fs-regulations/ico.html> (last visited Aug. 11, 2024).

⁷ MONDAQ, <https://www.mondaq.com/guides/results/14/1207/all/taiwan-blockchain> (last visited Aug. 11, 2024).

is an association of 24 licensed entities, including major exchanges like MaiCoin and Bito Pro. It works closely with the Ministry of Justice and the Financial Supervisory Commission (FSC) to draft regulations that support the industry's growth. Some of the key objectives include creating an anti-money laundering and anti-terrorism financing framework and developing a classification and rating system for crypto service providers. Recently, the second-largest company in Taiwan has started preparing to enter the cryptocurrency business. Its subsidiary, Fu Sheng Digital, recently, received a VASP License. This type of model can be sustainable in India, subject to the country's digitalization, which as per the records, is increasing daily; almost every household now, has a smartphone with maximum features available in their hand, and more and more people are getting information about these digital currencies. This revolutionized model can be a game changer for India's economic growth as it has the potential to improve the standards for Cryptocurrency, particularly ICOs and the startup ecosystem, where a budding startup can raise their funding through a Next-Gen ICO model which gives them the freedom of ease of doing business in India and most importantly, this will also safeguard the interest of retail investors.

Analysis

In order to opt for this Next-Gen ICO funding model, it is necessary to address several critical areas and concerns, including policy framing, regular supervisory mechanisms, and general public awareness. Some of the key areas and concerns are required to be dealt with and the same has been outlined below:

Crypto Meets Code: Policies For The Ico-Startup Synergy

The main concern surrounding cryptocurrencies, especially ICOs, in many countries is related to regulations and surveillance. In the Official Digital Currency Bill, 2021⁸, the Government of India has discussed the procedures for regulating cryptocurrencies. Additionally, the finance minister has expressed plans to introduce an Indian-made cryptocurrency that will be regulated by the Reserve Bank of India.⁹ If Indian policymakers do not wish to adhere to the international approach regarding funding for ICOs in startups, they have the option to adopt a regulated currency being developed by the

⁸ The Cryptocurrency and Regulation of Official Digital Currency Bill, 2021.

⁹ Monisha Purwar, *Having A Central Bank Digital Currency: Path Ahead*, LiveLaw (Feb. 4, 2022, 12:24 PM) <https://www.livelaw.in/columns/central-bank-digital-currency-cbdc-finance-minister-nirmala-sitharaman-union-budget-reserve-bank-of-india-rbi-191136>.

Reserve Bank of India. This would allow the government or lawmakers to have oversight over startups that choose to raise funds through ICOs.

The policy makers could additionally turn to the roadmaps implemented for regulating ICOs in countries such as the USA, Dubai, Japan, and the European Union. In Dubai, the Virtual Asset Regulatory Authority (VARA) has established regulations and guidelines for crowdfunding through Initial Coin Offerings.¹⁰ Similarly, Japan which is recognized as a silent superpower in the upcoming generation of global leaders, has great flexibility in its approach towards cryptocurrencies and initial coin offerings inside the startup industry.¹¹ The 2019 Amendment, which became effective within one year of being announced, has introduced substantial and essential modifications to the regulatory framework for crypto assets in Japan.¹² Certain crypto assets distributed using distributed ledger technologies (DLT), such as blockchain, will be explicitly regulated as Type I securities. Hence, the procedure of requesting and presenting these digital assets, such as ICOs, to Japanese investors will require careful examination and structuring in order to evade any potential regulatory obstacles. Another part of this may be observed in relation to Japan's start-up welcoming system. In the recent year, Japan achieved the 29th position out of 150 nations in the Ease of Doing Business rating.¹³ The combination of these two factors has the potential to yield positive results for Japan's economy.

Regulating the cryptocurrency market is a complex and time-consuming undertaking due to its lack of regulation. However, despite the challenges, the benefits it offers justify the need for patience in achieving effective regulation.¹⁴ An advantage of incorporating ICOs into the Startup Ecosystem is the direct influx of Foreign Direct Investment (FDI) and the capital raised through the ICOs. As per the data of the ICO watchlist (2020), the United States of America (USA) had the highest number of ICO projects globally with capital raised \$811,282,744 accounting for 16.3% of the total. In comparison, the combined European Union (EU) total accounted for

¹⁰ VARA, <https://www.vara.ae/en/> (last visited Aug. 11, 2024).

¹¹ José Campino, Ana Brochado & Álvaro Rosa, *Initial coin offerings (ICOs): Why do they succeed?* Financial Innovation 8, Article Number: 17 (2022).

¹² *New Regulations in Japan on Security Token Offerings*, Greenberg Traurig (2019) <https://www.gtlaw.com>.

¹³ DOING BUSINESS, <https://archive.doingbusiness.org/en/rankings> (last visited Aug. 11, 2024).

¹⁴ Mark Anson, *Initial Coin Offerings: Economic Reality or Virtual Economics?*, THE JOURNAL OF PRIVATE EQUITY, Vol. 21, No. 4, 41-52 (2018).

14.95%.¹⁵ Furthermore, the United States is at the top of the ranking in terms of ICO funding. These data indicate that it is unwise for India to refrain from embracing or adopting cryptocurrencies, particularly ICOs. Instead, they demonstrate how developed countries consistently outpace us in this regard. Indian lawmakers should promptly address the necessity of enacting legislation and implementing rules pertaining to cryptocurrencies and startup funding.

Each government adopts a distinct method of regulating cryptocurrencies, whether it be the USA, UK, or any other nation. The responsibility for determining the most appropriate method of implementing policies mostly lies with the lawmakers.

The Risk Matrix: A Need for Digital Armour?

The ICOs are fraught with a multitude of risks, which is likely one of the reasons why India continues to prohibit them. These dangers are so substantial that they have the potential to undermine the nation's integrity and sovereignty. One such risk is foreign funding from an unidentified source. If a startup receives funding from an unidentified source, it will be difficult for the authorities to identify the individual who invested. Another additional risk associated with ICO funding is that it opens the door to fraud and scams perpetrated by shell companies or startups. Given that ICOs are still relatively new in the Indian market, the likelihood of fraudulent activities is particularly high in today's technologically advanced world. Regulating authorities must take charge to raise awareness about cryptocurrencies and blockchain technologies. Merely having a thorough policy is insufficient. In addition to that, state-sponsored awareness programs, regulatory bodies, and marketing can contribute to raising awareness among individuals to prevent them from becoming victims of fraud and scams.

The policymakers can formulate a policy requiring startups to adopt an Initial Coin Offering (ICO) model to assure the public and regulatory authorities through their white paper and business plan regarding the minimal level of risk involved and the actual viability of the enterprise. This will instill a feeling of assurance in the general public, encouraging them to invest in the startups. The policy must be designed to mitigate the risks connected with ICOs. In this regard, as discussed in the earlier section of this article, a similar model to Taiwan can be the best fit.

¹⁵ Marina Kasatkina, *Towards the Harmonisation of the Initial Coin Offering Rules: Comparative analyses of The Initial Coin Offering legal regulation in the U.S.A. and the E.U.*, INT'L COMPARATIVE JURISPRUDENCE 2022 8(1), 26-47 (2022).

Turbulence: Policies for Market Volatility

Startups are the smallest institution of the economy and thus, are very much confined in terms of their institutional and operational resources. Herein, even if we shift to this new model, it will have its pros and cons. This novel fundraising mechanism has a strong impact on some market factors like volatility, saturation, listing, utility, etc. To minimize the negative impacts and maximize the positives, we need to stabilize the abovementioned factors.

The overall market utility of these ICOs, often referred to as Token Sales in the technical parlance has to be redesigned and redefined regularly in such a manner that makes it aligned with the prevailing economic models. This demand as well as utility can be enhanced by integrating it with the sale-purchase model of the new products as well as services. In addition to this, some incentives like rewards, profit-sharing for long-term holding of ICO, and some loyalty programs can also allure them and this can also prevent the act of reselling the token within a definite prescribed period. A robust buyback mechanism along with tie-ups with certain government-recognized crypto-exchanges can help the organization to mitigate the challenges posed by the volatile market. All of these small steps can make a huge difference in the financial health and growth of the startups.

Startups have a huge prospect to harness the potential of the global market and when it comes to India-originated startups, this prospect rises manifolds. India has a relatively lesser Purchasing Power Parity and thus, it has the potential to attract a huge proportion of international investors. However, the only hurdle that lies in the way is the regularization of the whole ICO mechanism, rather than the cryptocurrency market. This should be done on a priority basis to explore the new ventures of global capitalism and economic growth.

Conclusion

These Initial Coin Offerings seem to be the digital tulips of the 21st century which promises exorbitant growth but due to the financial as well as regulatory constraints, this glittering picture has turned into a cautionary alarm. This digitally and technically flourishing era has paved the way for new avenues of growth but at the same time, a certain level of caution backed by a robust regulatory framework and a set of skilled manpower to tackle the legal, technical as well as compliance issues are required. The imperative to formulate and enact robust regulations and frameworks for ICOs is more pertinent than ever at this point.

If big giants like Telegram, and Ethereum, can use this model, then, in the view of authors, we- the third biggest startup ecosystem shouldn't hesitate to embrace it. If it has been regularized in developing nations like U.A.E, Australia, etc.,¹⁶ then, it stands imperative for our nation to take a step forward and do its bit towards the financial growth.

We now have to become the guardrails for our entrepreneurial minds and that can be done only after building a robust and resilient technologically integrated system with an adherence to strictly enforceable legal compliances. A sigh of relief in this scenario is the above-proposed policy. An agenda to make Indian startup funding ICO-based by 2040 along with the enactment and implementation of the above proposed ways can be a game-changer.

¹⁶ PWC, *supra* note 189.

10

Innovation Markets and Startup Mergers: Balancing Collaboration and Antitrust

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Abstract: The acquisition of startups by big firms to gain valuable technology is on a rise today. There is worry among researchers and practitioners that this will be harmful for competition and innovation. These mergers or acquisitions go unchecked due to inadequate antitrust enforcement in this area. This is due to the inadequacy of the basis of modern antitrust law which believes that intervention on the side of false positives will be costlier than condemning false negatives. This argument is based on the fact that the market itself corrects the anti-competitive behaviour. Though this does not seem fit in the scenario of startup acquisitions, especially the innovation startups by the incumbent firms that are acquiring them to eliminate their competitors. These acquisitions are not being regulated so it is moving the startup to innovate for the satisfaction of their highest bidder.

The article will be discussing the rise of the required movement of anti-competitive laws from the old model of action to some new checks and balances especially designed for the startup acquisitions as it is hard to satisfy the evidentiary requirements to prove that these mergers anti-competitive. Additionally, as competing firms exit the market, the bargaining power and purchase prices for startups decline, dulling the incentive to innovate and negatively impacting productivity growth. The author insists that these problems arise due to the lack of effective antitrust laws and appropriate regulatory oversight; the present regime does not guarantee adequate protection for market competition or innovation. The study calls for stronger antitrust enforcement and more balanced regulatory measures to ensure mergers do not turn into collaboration that undermines the competitive and innovative landscape necessary for economic growth.

Keywords: Startup, Merger, Antitrust Enforcement, Error cost, Premerger Review.

Introduction

Flipkart, the Indian e-commerce platform that began with the one-room apartment of Sachin and Binny Bansal in Koramangala, Bengaluru was founded in the year 2007. The company initially used to sell books and later went on to expand itself with the acquisition of companies like Myntra, LetsBuy.com and others. It is one of the major key players in the Indian market of e-commerce which competes with Amazon. Later, Walmart acquired it in the year 2018 and it became one of the largest e-commerce deals in history.

The story of Flipkart is one of the examples of the rapid growth that is a primary feature of startup innovations. It is also one of the biggest examples that the small fish has to either move in the shelter of the big fish or get eaten by it. Innovation markets have been the cause of huge economic growth since the 1990s. The innovation market refers to Research and Development(R&D) that is aimed at improving of creating new goods, services and processes.¹ It is not a market to sell goods, it is rather a market of ideas, development and newer innovations and technology.

In this article, in order to touch the major topic of balancing the mergers and acquisitions of the innovation industries with the large incumbents, we will primarily be talking about startups especially tech startups. Today the world is tech-centric and imagining anything even the drafting of laws seems impossible without it. The high-tech industry is one of the most lucrative industries as of today and they are highly innovative and dynamic. Today, not only the large incumbents, but the startups are also the key innovators.

Start-ups are the source of numerous valuable technologies and innovations. India is the 3rd largest startup hub in the world². These unicorns are expanding their arms at a fast pace and contributing to the economy. These startups not only provide the solution to the existing problems of the society with its innovation, but they also provide opportunities for large-scale employment. The competition for the leading companies increases with the incorporation of such start-ups which imposes a threat of competition, and this threat leads to the mergers and Acquisitions of start-ups with the leading companies. There are many notable examples like Facebook's acquisition of

¹ Robert J. Hoerner, Innovation Markets: New Wine in Old Bottles, 64 ANTITRUST L.J. 49 (1995).

² Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

WhatsApp, google's acquisition double clicks, Microsoft's acquisitions of GitHub and LinkedIn.³ When we look onto one of the largest Acquisitions in the global e-commerce sector, which is Walmart acquired Flipkart.⁴ The several Indian bodies opposed the acquisition even after CCI approved the acquisition. The said deal made the competition in the e-commerce space in India went a notch higher as Walmart which was earlier a big competitor in the e-commerce sector acquired this startup which was becoming its competition.⁵

The antitrust regulations present are inefficient to regulate these mergers. The Antitrust law is usually directed for the proposed combination of large firms. It is done through analysing the combining incumbent's data and estimating the amount of appreciable adverse effect it is likely to cause on competition within India⁶, but the startups are new entrants and small having negligible data on them, which makes it almost impossible to prove the anti-competitive effect their acquisition will cause. In this article we will begin by defining Mergers and Acquisitions and then our primary focus will argue on the reasons behind the inadequacy of the current antitrust regime for Startups with some empirical data to support it. In the end we will be arguing that intervention in Startup mergers and acquisitions will be beneficial for the competition market in the longer run.

Mergers, Acquisitions, and Antitrust Regulations in the Startup Ecosystem

A Merger is nothing but an agreement between two companies or among two or more companies to form a new company or an existing one. According to Black Law Dictionary, “A merger of corporations consist in the uniting of two or more corporations by the transfer of property of all to one of them, which continues in existence, the others being swallowed up or merged therein”.⁷ Section 2(a) of the competition act defines acquisition as “acquisition means, directly or indirectly, acquiring or agreeing to acquire- (a) shares, voting rights

³ Carl Shapiro, *Antitrust in a time of populism*, International Journal of Industrial Organization, (Oct. 24, 2017), <https://dx.doi.org/10.2139/ssrn.3058345>.

⁴ Walmart and Flipkart Announce Completion of Walmart Investment in Flipkart, India's Leading Marketplace eCommerce Platform, Corporate Walmart, (Aug. 18, 2018), <https://corporate.walmart.com/news/2018/08/18/walmart-and-flipkart-announce-completion-of-walmart-investment-in-flipkart-indias-leading-marketplace-ecommerce-platform>.

⁵ Walmart invests \$3.5 billion in Flipkart; ups stake to 80.5%, Times of India (indiatimes.com), (Sep. 3, 2023, 01:42 IST), <https://timesofindia.indiatimes.com/business/india-business/walmart-invests-3-5-billion-in-flipkart-ups-stake-to-80-5/articleshow/103315545.cms>.

⁶ The Competition Act, 2003, § 3, No. 12, Acts of Parliament, 2003, (India).

⁷ MERGER Definition & Legal Meaning, The Law Dictionary, <https://thelawdictionary.org/merger/#:~:text=A%20merger%20of%20corporations%20consist,swallowed%20up%20or%20merged%20therein>, (last visited Aug. 7, 2024).

or assets of any enterprise; or (ii) control over management or control over assets of any enterprise.⁸ Mergers and acquisitions are powerful instruments for significant growth and Indian businesses recognize it as an essential strategic tool. The idea of mergers and acquisitions has always been a helpful tool for smaller companies to enter into the market, but nowadays, the corporate sector, especially the large tech companies are moving towards the route of mergers and acquisitions as it is now a new survival kit for the corporation by reducing the competition through increasing integration of markets. Excess capacity increases competition in the market by which the growth and profit of the company reduce.⁹

Antitrust laws focus on the possible injuries to the competition and regulate the Mergers & Acquisitions that such merger & acquisitions shall not be anti-competitive in nature.¹⁰ Competition Commission of India being a watchdog, investigates the anti-competitive practices of tech and all the other companies. In the Indian e-commerce market, dominant players may threaten small and medium-sized enterprises through anti-competitive practices like cartelisation. The Competition Commission of India (CCI) examines exclusive agreements on discounts and platform neutrality, enforces parity terms, and assesses the activities of aggregators in order to address these concerns. This guarantees equitable participation and fair competition for all.¹¹ Due to government policies and anti-competitive laws, the corporation cannot act in oligopoly set ups. This act of government is done to maintain the competitive edge in the market, to allow new entrants in the market and to reduce the arbitrariness of the corporation in fixing the rate of a product or services. However, these government policies/laws fail to recognize some problems that are stated below:

Fall in Market Competition

Dominant firms usually acquire startups to reduce the competitiveness or to reduce rivals from the market of such technology. For example, Facebook acquired WhatsApp and Instagram even when there were no

⁸ The Competition Act, § 2(a), No. 12, Acts of Parliament, 2003, (India).

⁹ Emerging Trends in Mergers & Acquisitions, Prime database, <https://www.primedatabase.com/Article/dir-99ar4.pdf>, (last visited Aug. 7, 2024).

¹⁰ Colleen Cunningham, Florian Ederer, and Song Ma, *Killer Acquisitions*, 29 Journal of Political Economy 3, 649-702, (March 2021), <https://dx.doi.org/10.2139/ssrn.3241707> (<https://perma.cc/SRS5-47LZ>).

¹¹ Basant, R., & Morris, S., Competition Policy in India: Issues for a Globalising Economy, Economic and Political Weekly, 35(31), 2735–2747, (Aug. 4, 2000), <http://www.jstor.org/stable/4409560>.

direct competitions¹². The reason behind such acquisition is that the market leaders are generally profitable (both for the leader and for the startups) and has a good consumer base¹³. So, rather than struggling into the market, Startups tend to sell their technology to industry leaders rather than trailing incumbents as they are well-established in the market.¹⁴ This act of acquiring startups is moving the market towards being anti-competitive. For example, the acquisition of DoubleClick by Google,

When a startup enters the market, it might be possible that it is not entering with the motive of merger but for the product market practice, but that is rarely provable. Mergers and acquisitions of such startups can be horizontal and vertical¹⁵. Both the merger receives different types of antitrust treatment. When a merger is horizontal, the large incumbent acquires startups, they might be acquiring the startup not for using such technology, but for the purpose to prevent such technology to reach the market and create rivalry to such product market.¹⁶ Federal Trade Commission vs. Mallinckrodt ARD Inc¹⁷ is the example of those rare cases where the takeover target of acquirer was explicitly expressed to create dominance in the market. When the merger is vertical, there is a slight risk of anticompetitive harm that if it is acquired by the rival company then it would restrict the access of technology. The motivation for such acquisitions is nothing but acquiring new technology to exclude such small rivals from the market and this would impair them to improve the quality of the product market¹⁸. An example of

¹² Prof. Igor Cunha, *Case study: THE WHATSAPP ACQUISITION FROM FACEBOOK*, pg. 7-10, (Jan. 7, 2015), https://run.unl.pt/bitstream/10362/15370/1/Cosentino_2015.pdf.

¹³ Kevin A. Bryan and Erik Bovenkamp, *Antitrust Limits on Startup Acquisitions*, 56 Review of Industrial Organization 615, (March 10, 2019), <https://dx.doi.org/10.2139/ssrn.3350064> (<https://perma.cc/M5E4-ANPJ>).

¹⁴ Ufuk Akcigit & Sina T. Ates, *Ten Facts on Declining Business Dynamism and Lessons from Endogenous Growth Theory*, American Economic Journal: Macroeconomics 13, 29-31, (Jan. 2021), <https://www.jstor.org/stable/27113839>.

¹⁵ “A horizontal merger is one in which the parties are competitors (or potential competitors), such as a merger between competing computer manufacturers. By contrast, a vertical merger involves parties located at different levels of a supply chain (and who thus do not directly compete), such as a merger between a computer manufacturer and an operating system developer”.

¹⁶ Michael D. Whinston, *Antitrust Policy Toward Horizontal Mergers*, 3 Handbook of Industrial Organization 36, 2369-2440, (Armstrong and Porter, 3rd ed., 2007).

¹⁷ Federal Trade Commission v Mallinckrodt ARD, 1:17-cv-00120, 2017 WL 242849, (Complaint for Injunctive and Other Equitable Relief).

¹⁸ Bryan and Hovenkamp, *Antitrust Limits on Startup Acquisitions*, 56 Review of Industrial Organization 331, 342-343, (March 26, 2020), (horizontal and vertical mergers), <https://www.jstor.org/stable/26892414>.

vertical acquisitions is the eBay and PayPal, where eBay gains control over the payment services and makes payment easier for the customers¹⁹.

Innovation Incentives

The other concern about the M&A of start-ups and large incumbent is the fall in purchasing price of new technology by start-ups. As technology is created either to fill the technological gap between market leaders and laggards or to improve the quality of incumbent's product. When such technology is introduced in the market, it is most likely to acquire by market leaders, and it will tend to pull away the competition. For example, the Amazon, Apple, Goggle, Facebook have acquired many of the companies in the last ten years to create a competitive threat and to expand their dominance in the market just like Goggle acquired DoubleClick, Goggle expanded its AdSense network into display ads by gaining the advantage of good relations of DoubleClick with web publishers, advertising agencies²⁰. so that small market players will exit the market as they won't be able to cope with the new market technology. As the number of competing buyers will reduce and few of incumbent will be left to compete that lead to the reduction in the purchasing price of the new technology²¹. This less purchase price of start-up will demotivate the startup innovations from innovating further.

Limitations of Current Law

Another concern is about the Error cost as antitrust laws prevent the unfair practices of the business that could harm the competition. The regulatory body while deciding the effect of acquisition on the competition believes that the cost of condemning a false positive is higher than the cost accrued if a false negative gets ignored²². The reasoning behind this principle is that false positives (wrongly identifying a competitive behaviour as anti-competitive) can stifle innovation and competition, which are seen as more socially costly. On the other hand, false negatives (failing to identify an anti-competitive behaviour) might allow some harmful practices to persist, but the market may

¹⁹ David O Sacks, *The Real Reasons PayPal Sold to Ebay*, (Jan 11, 2021, 2:33 AM EST), <https://www.forbes.com/sites/quora/2014/10/03/the-real-reasons-paypal-sold-to-ebay/>.

²⁰ Louise Story and Miguel Helft, *Google Buys DoubleClick for \$3.1 Billion*, The New York Times (April 14, 2007), <https://www.nytimes.com/2007/04/14/technology/14DoubleClick.html>.

²¹ Bryan and Hovenkamp, *supra* note 218, at 345-346.

²² Joshua D. Wright, *Abandoning Antitrust's Chicago Obsession: The Case for Evidence-Based Antitrust*, 78 Antitrust law journal 241, (2012), <http://www.jstor.org/stable/43486843>.

eventually correct these issues²³. So, sometimes court allows business activity which it considered as good for competition even it is anti-competitive in nature. This analysis can be supported by the theory of market “contestability” as given by Professor William Baumol in the 1980s.²⁴ This theory describes markets that are concentrated but nevertheless competitive because the prospect of entry deters incumbents from setting supracompetitive prices. The theory hinges on a number of strong assumptions, most notably that entry is relatively easy and expedient.²⁵ This principle counts as a good practice for traditional businesses, but it is of no use while controlling competition in Innovation Startup’s acquisitions. This is due to the fact that innovating costs a lot of money and the small rival companies which were already behind will now find the competition gap widen and will be forced to leave the market. The entry to the market where the large incumbents have become the key player will be tough as the larger company is already acing in technology. This will decrease the ease of entry to the field and that ease of entry is relevant to market self-correction is mostly undisputed on all side of literature.²⁶ This will eliminate the competition and make the market anti-competitive instead of self-correcting.

Remedies

The discussion above about the problems and the fear that lies in the market brings us to the possible remedies that can be implemented to reduce the anti-competitiveness. The first and foremost suggestion will be of altering the pre-merger review and making it more robust. The pre-merger review sets a certain asset or turnover threshold which is if crossed by the merger and acquisition that is formed then only the regulatory body will take a note of it.²⁷ The startups being small and new entrants, their acquisition rarely reaches this threshold, thus their acquisitions are hardly monitored. It is

²³ Frank H. Easterbrook, *The Limits of Antitrust*, 63 Tex L Rev 1, 21 (1984) (“If judges tolerate inefficient practices, the wrongly-tolerated practices will disappear under the onslaught of competition. The costs of [false positives] are borne by consumers, who lose the efficient practices and get nothing in return.”).

²⁴ William J. Baumol, *Contestable Markets: An Uprising in the Theory of Industry Structure*, 72 Am Econ Rev 1, 4, (1982), (arguing that concentrated industries will nevertheless be competitive if they are “contestable” in the sense that the threat of entry is ever looming).

²⁵ Avinash Dixit, *Recent Developments in Oligopoly Theory*, 72 Am Econ Rev 12, 15–16, (1982), <http://www.jstor.org/stable/1802295>.

²⁶ Jonathan B. Baker, *Taking the error out of “error cost” analysis: what’s wrong with Antitrust’s right*, 80 Antitrust L J 9, 34, (2015), <https://www.antitrustinstitute.org/wp-content/uploads/2018/08/Error-Cost-Baker-ALJ-80-1-FINAL-PDF-1.pdf>.

²⁷ The Competition Act, 2003, § 3, No. 12, Acts of Parliament, 2003, (India).

suggested that the regulatory body should lower down this threshold as these startups, though they are small, but they will make progress and help the acquiring incumbent to increase its market shares by leaps and bounds.²⁸ This lowering down will at least bring the acquisitions of the small startup innovations in the purview of regulatory body.

Though pre-merger reviews have always served as strong tactics to counter the anti-competitive mergers and acquisitions, but as expressed above in the article due to it being administered prospectively it is not suitable and foolproof for startup innovations. Thus, it is suggested that the comprehensive rules to be drafted specifically to serve the mergers and acquisitions of startups. These rules can function by deciding the current market value of the startup innovation and if not then the price at which it is being acquired as its current market value. This will then help in calculating the growth in market share that it can lead to by analysing the technological invention it is providing. This will help the regulatory body to decide whether the acquisition of that startup innovation will give an anti-competitive edge to the larger incumbent if it acquires it.

On the basis of this, the startup innovation if predicts an anti-competitive edge which will widen the gap between the acquiring incumbent and other competitors leading them to leave the market, a *compulsory licensing regime*²⁹ should be imposed for that innovation. The company patenting that invention will need to compulsorily license it so it can be used by its competitors which will help the competitors to stand in the market. It might be argued that this will lead to a decline in the amount that startup innovation would have earlier received from the acquiring company but seen from a different perspective the acquiring company will still pay the huge amount. The larger company requires the technology to remain the leader of the market and if the smaller company acquires it, it might not require to license it as it won't be giving an anti-competitive edge to that company. This will then prevent the larger company from getting a new technology, the fear of which will make the larger incumbent acquire the startup and it will also be allured by the money coming from license.

²⁸ Bryan and Hovenkamp, *supra note* 221.

²⁹ Ayush Sharma, *Compulsory License: The Most Happening Section Of The Patents Act, 1970*, Mondaq, (Oct. 15, 2015), <https://www.mondaq.com/india/patent/435044/compulsory-license-the-most-happening-section-of-the-patents-act-1970>, ("authorizations permitting a third party to make, use, or sell a patented invention without the patent owner's consent.").

Conclusion

The accelerating pace of change in the market which is leading to the creation of new technologies and products have entirely changed the products in the market. It has also led to change in competition in the market. It is nowhere similar to the times when the anti-competitive firms used to be balanced by the new entrants as proposed by the principle of error cost which is the primary guiding principle for regulating competition around the globe. Today with the growing presence of innovation markets and startup innovations the shape of mergers and acquisitions has completely changed. Today the bigger companies are acquiring their smaller rivals and primarily the startup innovations who are coming with new and revolutionary innovations. This is a two-way exchange as the new startup innovations require a means to enter the market and the acquiring incumbents are providing the same, but as discussed in the article, this has set in motion an alarming change for the competition balance of the market. The larger incumbents are acquiring the startup innovations to get a technical edge in the market making them rise ahead of their rivals forcing the rivals to leave the market. This is also results in a scenario where the primary objective of the startup innovation has become to satisfy the need of the larger innovation and not innovate to bring a change in the product which will benefit consumers as a whole. This all requires the re consideration of current laws and regulations as they don't fit to the changing environment of competition in the market. By decreasing the asset or turnover threshold, a strong mechanism would be in place for pre-merger reviews. The lower threshold would force smaller investment deals into regulatory oversight so that even such deals would be evaluated for anti-competitive effects. The imposition of compulsory licensing of startup innovations that will affect the competition in the market and altering of regulations for pre-merger review to bring the mergers and acquisitions of startup innovations under the purview of regulatory body as it being small rarely reaches the threshold. We believe adapting to the changing market and re considering the competition principles is the way forward towards balancing the collaboration and antitrust in the market. This would enable the startups to contribute in the economic growth of the country.

AI in Start-Up Security: Combating Cyber-Attacks

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Abstract: Entrepreneurs have benefited greatly from the plethora of options, creative business models, and industrial expansions made possible by technological breakthroughs, particularly in the field of big data. Still, small business owners are often unprepared for cyber security requirements. Technological and knowledge gaps are encountered by policymakers, business leaders, and nonprofit groups that provide support to these entrepreneurs. This study examines the present state of cyber security issues that small businesses and startups are facing and highlights the urgent need for more research to help these companies protect their customer and personal data and avoid future interruptions to their operations.

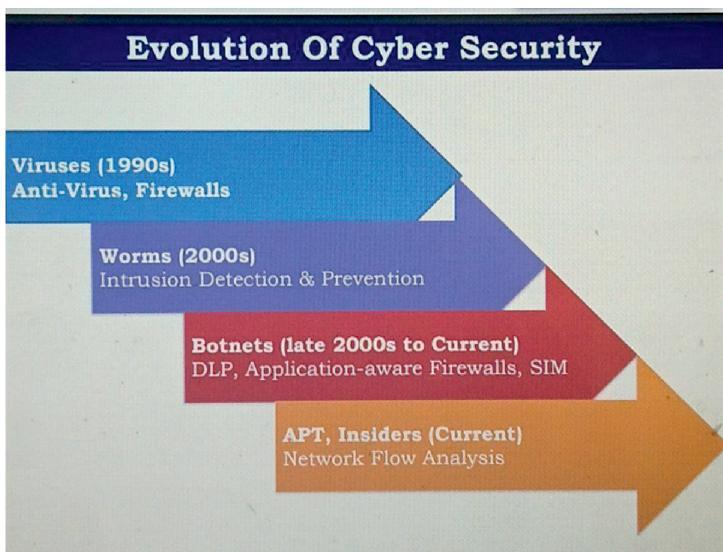
Startups are essential to economic expansion because of their inventiveness and adaptability. But their operational frameworks' fundamental weaknesses make them easy pickings for cyber-attacks. This essay examines the technical and legal requirements for strong cyber security defenses in startups, highlighting the vital role that governmental regulations, industry norms, and technical developments play in protecting these fledgling businesses.

The purpose of this paper is to present a thorough study of the legal requirements imposed by current rules, the cybersecurity issues faced by startups, and the potential benefits of AI and ML in strengthening cybersecurity defenses. The consequences of non-compliance will be covered in more detail, and suggestions for a strong legal framework that might assist startups in reducing cyber risks will be made.

Historical Evolution of Cybersecurity

The first publicly known cyber-attack, known as the Morris Worm, which infected around 10% of the 60,000 computers linked to the internet at the

time, gave rise to the area of cybersecurity in the early 1980s¹. This incident brought attention to the weaknesses in networks and signalled the start of an ongoing conflict between cybersecurity defences and cyber threats. With the emergence of more traditional viruses and malware, organizations started to put more stress on securing the network and that is to say they started to put stress on cybersecurity. After that many big corporations started to use traditional cybersecurity methods and some technical methods. But with the advancements of defending methods, cyber attackers also started to evolve their methods with that new form of cyber-attacks came into existence. Those new forms of cyber-attacks are so sophisticated in nature that it is difficult to detect. Advanced Persistent Threats (APTs) and ransomware are examples of the sophisticated forms of cyber threats that emerged in the 2010s, with global cybercrime costs predicted to reach \$6 trillion annually by 2021. Other organized cyber threats that emerged in the 1990s included Distributed Denial of Service (DDoS) attacks and viruses like the “ILOVEYOU” worm, which caused an estimated \$10 billion in damages globally.² In the last few decades, when startups started to emerge, the cyber attackers started to target those startups as well because they lack resources to defend themselves so they cannot defend themselves.



¹ Franka Knieß, *Computer Worms: What They Are, How They Infect Your Computer, and How to Protect Yourself*, AVIRA BLOG (Jan. 10, 2025), <https://www.avira.com/en/blog/computer-worm#:~:text=Morris,the%20internet%20at%20the%20time>.

² Rahul Awati, *ILOVEYOU Virus*, TECHTARGET SEARCHSECURITY (Jan. 10, 2025), <https://www.techtarget.com/searchsecurity/definition/ILOVEYOU-virus>.

So, in recent times, there is so much buzz on growing startups with resilience³

Startups' Cybersecurity Threat Environment

While it's known that cyber-attacks pose significant challenges to businesses, large corporations often have the resources to effectively counter these threats. As a result, most cyber-attacks are now targeted at small businesses and startups, which are more vulnerable due to limited budgets and resources. These companies often struggle to defend themselves, even against traditional phishing emails or malware, making them the most vulnerable groups in need of attention when it comes to tackling cyber security threats. But the question arises what types of cyber-attacks affect most of the startups, so that we can able to suggest proper solutions for them.

Cyber-Attack Types and Sizes

Cyber dangers are numerous for startups, but some of the more prevalent ones are as follows:

- **Phishing Attacks:** In 2020, over 75% of firms worldwide reported experiencing phishing attacks, with an average loss of \$1.6 million.⁴
- **Ransomware:** In 2020, ransomware assaults increased by 150%, and ransom demands averaged \$170,000, with some cases surpassing \$1 million.⁵
- **DoS Attacks:** According to estimates, a DDoS assault can cost up to \$120,000 per hour of outage in 2021. Many businesses are unable to afford such financial losses.⁶
- **Insider Threats:** Whether by carelessness or malevolent purpose, insiders were responsible for 34% of data breaches in 2021.⁷

³ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

⁴ Phishing Attack Data, *2020 Phishing Trends Report*, Committees_D-Cyber-n-Legal-and-Ethical.pdf, at 5.

⁵ John Leyden, *Ransomware Attacks More Than Doubled Last Year as Cybercrime Operations Scale Up During Coronavirus Pandemic*, PORTSWIGGER DAILY SWIG (Mar. 8, 2021, 14:28 UTC), <https://portswigger.net/daily-swig/ransomware-attacks-more-than-doubled-last-year-as-cybercrime-operations-scale-up-during-coronavirus-pandemic>.

⁶ DDoS Attack Costs, *Impact of DDoS on Businesses*, CyberSecurityConclaveAtVigyan BhavanDelhi_1.pdf, at 8

⁷ Insider Threat Statistics, *2021 Insider Threat Report*, CyberSecurityConclaveAtVigyan BhavanDelhi_1.pdf, at 9.

Effect on the Growth of Startups

These cyber threats have grave consequences for entrepreneurs.

- **Losses incurred financially:** Even a relatively simple cyber-attack on a startup can cost the company up to half of its valuation, as many attackers demand high ransoms. In cases involving malware, if the attack goes undetected for months, the financial damage can be even greater. This is why a single cyber-attack can result in significant financial losses; in 2021, the average cost of a data breach was \$4.24 million.
- **Long-term reputational harm:** The essential condition for any startup to grow is to build a strong reputation in the market, which helps establish trust with customers. However, if a startup is affected by a cyber-attack, its reputation can be severely damaged, leading to a loss of customer trust. This not only harms the business but can also cause some startups to cease operations due to the loss of customers. Research shows that 60% of small businesses fail within six months after a cyberattack.
- **Operational Disruptions:** Since many startups provide online services, and vital customer data is often stored with third-party cloud service providers that may not be well secured, cyber-attacks have the potential to completely halt operations. Startups may be unable to access vital data by accessing it through fraud mails and mail wares, which could cause irrevocable disruptions to their business continuity.
- **Regulatory Fines:** New businesses that don't sufficiently secure client data risk paying hefty fines. Fines under laws such as the GDPR may amount to up to €20 million or 4% of annual worldwide turnover, whichever is higher.

The Need for Cybersecurity Solutions for Emerging Businesses

- **The status quo is insufficient:** Many startups continue to operate dangerously underprepared, despite the obvious risks. According to a 2020 survey, 40% of small businesses lacked a cyber incident response plan, and 60% lacked cyber security measures altogether¹². Moreover, a lot of startups think they are too tiny to be a target, not knowing that 43% of all cyber-attacks target small enterprises.⁸
- **AI and ML's Place in Cyber-security:** The application of machine learning (ML) and artificial intelligence (AI) to improve cyber security

⁸ CYBERSECURITY CENTRE OF EXCELLENCE (CCOE), <https://ccoe.dsci.in/blog/the-path-to-success-the-importance-of-preventing-cybersecurity-threats-for-small-businesses#:~:text=As%20per%20a%20CyberPeace%20Foundation's,significant%20role%20in%20achieving%20this> (last visited Jan. 10, 2025).

is growing. With predictive analytics providing insights into possible vulnerabilities before they can be exploited, artificial intelligence (AI) can assist in real-time threat detection and mitigation⁹. But incorporating AI into cyber security frameworks is a difficult task, particularly for businesses with limited funding. Adoption of AI-driven cyber security solutions is severely hampered by their high costs, which emphasizes the need for more easily available and reasonably priced tools for startups.¹⁰

- **The Need for an All-Inclusive Legal Structure:** Startups are not adequately protected by the cyber security laws that are currently in place. Even if they are comprehensive in certain areas, current regulations are frequently reactive rather than proactive. For example, the General Data Protection Regulation (GDPR) does little to stop data breaches from happening in the first place but levies steep punishments for them. Laws that penalize noncompliance and encourage startups to implement cyber security best practices are desperately needed.

Additionally, funding from national and international organizations is needed to support companies in successfully putting these ideas into practice. Grants, subsidies, and public-private partnerships may be extremely important in ensuring that startups have the resources they need to protect themselves from cyber-attacks.

Given the myriad challenges faced by startups and small to medium-sized businesses in combating cyber threats, data breaches, and data theft, it has become evident that current solutions fall short across enterprises of all sizes. This underscores the urgent need for innovative approaches specifically tailored to counter these attacks. However, to forge such innovations, it is crucial first to understand the key requirements that this new wave of solutions must address. The idea of the Research paper revolves around safeguarding the interests of Startups and Small businesses majorly from the Cyber-attacks which causes damage to them in more ways than one. However, every innovation in the field is not a viable option. Hence, the solution must be in proportion to the need, listed below are some Prerequisites which any innovation suggested must contain.

⁹ Safiullah, M., & Parveen, N. (2022). *Big data, artificial intelligence and machine learning: a paradigm shift in election campaigns. The new advanced society: Artificial intelligence and industrial internet of things paradigm*, 247-261.

¹⁰ K. Alhosani & S.M. Alhashmi, *Opportunities, Challenges, and Benefits of AI Innovation in Government Services: A Review*, 4 DISCOV. ARTIF. INTELL. 18 (2024), <https://doi.org/10.1007/s44163-024-00111-w>.

- **Cost effective solutions:** Start-ups operate on a very limited budgets¹¹ and very few start-ups able to allocate even some budget for cyber security management because of the high expenses in cyber security. So, the innovation must be cost effective.
- **Solution must be evolving nature:** In the new trend cyber attackers are using AI technology to narrowly target their attacks, to automate their cyber criminal tasks and to evade detection layers.¹² This latest trend suggest that cyber criminals are also harnessing new technology. So, the innovation must be of such nature which keeps evolve with time.
- **Automation of routine task:** Startups often operate with a limited workforce and frequently lack dedicated IT teams to perform routine checks and detect issues with servers and third-party applications. Therefore, an innovative solution that provides automated routine testing of data and servers would be highly valuable.
- **Post cyber-attack detection:** Traditional methods of handling cyber threats often fail to detect breaches for months, allowing damage to escalate. Thus, there is a pressing need for innovation that swiftly detects data breaches, minimizing the potential harm.
- **Provide security checkup to cloud service:** Startups operates with limited IT resources, startups often rely on cloud service providers (CSPs). So, an innovation that offers robust security features and to regularly monitor and manage these accounts in CSPs to ensure data security.¹³

The list is extensive, but these essential features must be included in the innovative solution. It is also crucial to emphasize that traditional approaches have failed miserably, proving ineffective in detecting or controlling sophisticated new cyber-attacks.

Role of Artificial Intelligence in Cyber Security

Considering the global cybercrime expected to cost more than \$23 trillion by 2027, it's no surprise the cyber security industry is looking for better

¹¹ Full Bio, *How Many Startups Fail and Why*, (June 24, 2024), <https://www.investopedia.com/articles/personal-finance/040915/how-many-startups-fail-and-why.asp>.

¹² CyberGate Int'l, *The Evolution of Cyber Threats Over the Last Decade*, <https://cybergateinternational.com/blog/the-evolution-of-cyber-threats-over-the-last-decade/#:~:text=Cyber%20attackers%20are%20harnessing%20AI,scam%20and%20automated%20vulnerability%20exploitation> (last visited Aug. 9, 2024).

¹³ U.S. Small Business Administration <https://www.sba.gov/business-guide/manage-your-business/strengthen-your-cybersecurity> (last visited August 20, 2024)

ways.¹⁴ According to current trends, using artificial intelligence (AI) is the most favored strategy. John McCarthy coined the phrase “artificial intelligence” for the first time in 1956 while working on the AI summer research project at Dartmouth.¹⁵ Significant AI advancements that beyond human capabilities began to scare society at large in the final moments of the 20th century. Due to its transformative and innovative potential, AI is being employed by businesses to revolutionize industries worldwide, and India is no exception. The AI market in India is projected to reach \$8 billion by 2025, growing at a compound annual growth rate (CAGR) of over 40% from 2020 to 2025¹⁶. Given these developments, the use of AI in cyber security is increasing rapidly, with many companies adopting it as a key tool in their cyber security strategies.

A.I: The Cornerstone of Sustainable Solutions for Startups

The Quintessential which a startup needs to get over cyber security threats majorly revolves around Ransom ware detection, Phishing detection and malware detection while not neglecting the factors including cost effectiveness, end point security ,adaptive learning and self organization, Our AI curates a pathway for it in the manner described below:-

- **Ransomware detection:** “Ransomware” is a type of malicious software, or malware, that threatens a victim by destroying or blocking access to critical data or systems until a ransom is paid.¹⁷ More than 72% of firms globally were impacted by ransomware attacks as of 2023.¹⁸ One way that AI can help prevent ransomware attacks is by detecting and blocking them before they can infect a system. Machine learning algorithms can analyze patterns and behaviors to identify potential threats and prevent them from entering a network.¹⁹ It can also be used to predict

¹⁴ Alyssa Schroer, *AI Cybersecurity: 32 Companies to Know*, Built In (July 31, 2024), <https://builtin.com/artificial-intelligence/artificial-intelligence-cybersecurity>.

¹⁵ Artificial Intelligence (AI) coined at Dartmouth (no date) Dartmouth. Available at: <https://home.dartmouth.edu/about/artificial-intelligence-ai-coined-dartmouth> (Last visited: 09 August 2024).

¹⁶ India Artificial Intelligence, (Apr. 30, 2024), <https://www.trade.gov/market-intelligence/india-artificial-intelligence>.

¹⁷ 7MICROSOFT,<https://www.microsoft.com/en-in/security/business/security-101/what-is-ransomware#:~:text=Ransomware%20protection-,Ransomware%20defined,until%20a%20ransom%20is%20paid> (last visited Jan. 10, 2025).

¹⁸ Ani Petrosyan, *Global firms targeted by ransomware 2023*, Statista (Mar. 28, 2024), <https://www.statista.com/statistics/204457/businesses-ransomware-attack-rate/>.

¹⁹ Andrey Gvozdenko, *How AI will Revolutionize Ransomware Prevention*, Cynergy (Apr. 10, 2023), <https://cynergy.app/cyber-research/how-ai-will-revolutionize-ransomware-prevention/4765/>.

and prevent future ransomware attacks. By analyzing past attacks and identifying patterns and trends, machine learning algorithms can predict where future attacks are likely to occur and take proactive measures to prevent them.²⁰

- **Phishing Detection:** Startups often lack qualified IT teams and resources, while having to manage large client bases and handle thousands of emails related to orders and complaints. This makes them particularly vulnerable to phishing cyber-attacks. AI-based phishing detection solutions can detect most cyber-attacks. *It uses machine learning algorithms to analyze the content and structure of emails to identify potential phishing attacks.*²¹ Natural Language Processing (NLP) allows A.I systems to distinguish between legitimate communications and phishing attempts by analyzing the language, tone, and context.
- **Malware Detection:** Traditional antivirus detection systems rely on signature-based techniques, which compare files to a database of known malware signatures to detect matches. *Unfortunately, because this method only works against known variations and is easily circumvented by malware that has been altered to avoid detection, it is ineffective against advanced malware attacks.*²² AI-based solutions leverage machine learning algorithms to detect and respond to both known and unknown malware threats. *Large data sets can be analyzed by these algorithms to find patterns and anomalies that are frequently too complicated for people to see.*²³ Through this it can detect known and unknown malware which is missed by traditional antivirus software's.
- **Cost reduction and automation:** Given that AI can perform the work of human analysts more efficiently and effectively, it is well-suited to handle repetitive and routine tasks in cyber security, such as log analysis, routine vulnerability assessments, and patch management. By utilizing AI, startups can establish a secure cyber environment within their organization at a minimal cost.

²⁰ Andrey Gvozdenko, *How AI will Revolutionize Ransomware Prevention*, Cynergy (Apr. 10, 2023), <https://cynergy.app/cyber-research/how-ai-will-revolutionize-ransomware-prevention/4765/>.

²¹ Sonya Moisset, *How Security Analysts Can Use AI in Cybersecurity*, (May 24, 2023), <https://www.freecodecamp.org/news/how-to-use-artificial-intelligence-in-cybersecurity/>.

²² Cybriant, *Traditional Antivirus vs. EDR (Endpoint Detection and Response)*, CYBRIANT (last visited Aug. 10, 2024), <https://cybriant.com/traditional-antivirus-vs-edr-endpoint-detection-and-response/>.

²³ Sonya Moisset, *How Security Analysts Can Use AI in Cybersecurity*, (May 24, 2023), <https://www.freecodecamp.org/news/how-to-use-artificial-intelligence-in-cybersecurity/>.

- **Adaptive learning and self-organization:** Traditional cyber security approaches relied on static defenses that are easy to bypass. With AI, defenses can adapt in real time by analyzing data, identifying patterns, and enhancing policies to mitigate emerging threats. *With this dynamic strategy, companies may stop vulnerabilities before they are exploited and react swiftly to changing attack strategies.*²⁴ This makes it an adaptive solution to cyber security that can evolve on its own, but it needs to be complemented by human expertise.
- **Endpoint security:** A.I based endpoint security systems analyzes the endpoint devices through machine learning to check the behavior of endpoint devices and by that it can also bloc or restrict unauthorized access attempts to secure the sensitive targeted data. Through that it ensures that all the business data and infrastructure remains secured.

Challenges Associated with Using AI in Cyber Security

A.I do offer many innovative solutions, but it also has many unique challenges, and we will take a look into a few of them that we are considering the most important:

- **Algorithmic Bias:** *Systemic and repeated mistakes in a computer system that lead to unfair results, like favoring one arbitrary user group over another, are referred to as algorithmic bias.*²⁵ AI security systems detect malware using algorithms trained on specific data sets. However, if the training data is biased—stemming from skewed or limited input, unfair algorithms, or exclusionary practices during AI development—these biases will inevitably influence the AI's output and predictions, leading to potentially flawed or incomplete threat detection.
- **Anomalous is not malicious:** Many of the discussed probable approaches works on the model of anomaly for identifying suspicious activities. Although these methods have certain advantages, they also have the unfavorable side effect of identifying a lot of harmless activity. Numerous resources and actions that are unusual by design can be found while reviewing any established network infrastructure. These include vulnerability scanners, domain controllers, service accounts, and many more. *The SOC analyst may experience alert fatigue when reviewing the*

²⁴ Scott Harris, *theNET | Using AI in cyber defenses*, Cloudflare (Oct. 12, 2023), <https://www.cloudflare.com/en-in/the-net/ai-cyber-defenses/>.

²⁵ Abid Ali Awan, *What Is Algorithmic Bias?*, DATACAMP BLOG (last visited Jan. 10, 2025), <https://www.datacamp.com/blog/what-is-algorithmic-bias>.

*alerts provided by these assets by an anomaly detection system, which can be quite noisy.*²⁶

- **Malicious use of A.I.:** There are cases where attackers are also using AI in cyber-crimes for increasing the effectiveness of malware and to also bypass the defense mechanism and this can poses many challenges to defense mechanism. AI can be used to enhance phishing attacks in which the attackers can use the ai technology to make the phishing mails more convincing and personalized. AI can also mimic human interaction that will make harder to detect genuine messages and fraud messages. It can also help attackers to modify malware behavior to bypass cyber security system.
- **Data privacy:** Securing data privacy is one of the main obstacles to AI technology integration with cyber security. Large volumes of data are needed for AI systems to recognize possible dangers and pick up on patterns. *However, a lot of this data contains sensitive personal data that must be kept safe. Ensuring AI systems use data ethically and compliant with data protection rules is a persistent challenge.*²⁷
- **Automated attack tools:** A.I is not only capable of providing automated tools for defending the startups data but canal so be utilized by attackers to make automated attack tools that can automate stages of cyber-attack. For instance, Fraud GPT is an AI tool designed to write malicious code, create phishing pages, and generate undetectable malware. It provides a range of cyber tools that can stage increasingly sophisticated attacks, potentially making them ten times more effective than current methods. *The concerning thing is that the people who created Fraud GPT actively advertise it on the dark web, showcasing its potential and looking for money to make it even more lethal..*²⁸

Suggestions for Making Best Use of AI for Startups

There are many challenges in making AI-based cyber security solutions accessible to startups and small businesses. Since cyber attackers are also using AI, these smaller enterprises must leverage AI to defend themselves.

²⁶ Yoni allan, *Challenges for AI in Cybersecurity*, paloaltonetworks (Mar. 12, 2024), <https://www.paloaltonetworks.com/blog/2024/03/challenges-for-ai-in-cybersecurity/>.

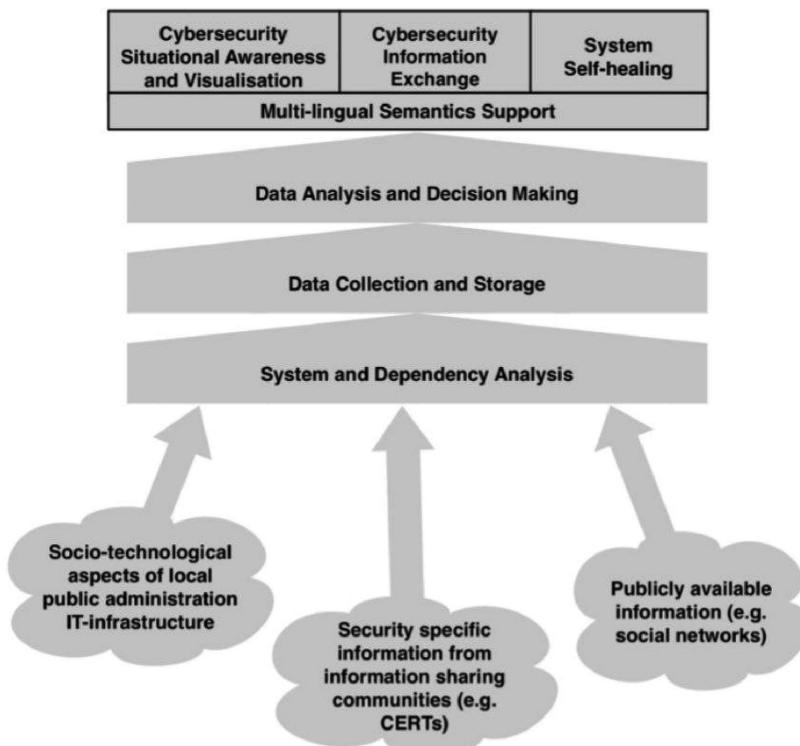
²⁷ Tech Emma, *Challenges and Future Trends in AI-Cybersecurity Integration*, Medium (Nov. 28, 2023), <https://medium.com/@emmaja/challenges-and-future-trends-in-ai-cybersecurity-integration-46e97c0387ba>.

²⁸ *FraudGPT, other malicious AIs are the new frontier of online threats*, (July 25, 2024), <https://ciso.economictimes.indiatimes.com/news/ot-security/fraudgpt-other-malicious-ais-are-the-new-frontier-of-online-threats/112004380>.

To do so, it's essential to explore the best available or most promising projects that can meet the cyber security needs of startups and small businesses. One such project is the CS-AWARE project, currently in its trial stage in Europe.

CS AWARE Project

CS-AWARE *The European Commission is funding a research and innovation project called Cybersecurity Situational Awareness and Information Sharing Solution for Local Public Administrations based on Advanced Big Data Analysis as part of the Horizon 2020 program.²⁹*



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Approach focus on collection of static information data collected on run time from different organization, then the collected data will get processed to support the main objective of it i.e.-

- Provide situational awareness to system operators or administrators via visualization

²⁹ Project Overview, CS-AWARE (Feb. 16, 2021), <https://cs-aware.com/project-overview/>.

³⁰ Cybersecurity Framework, in *Advanced Cybersecurity Strategies 4* (John Doe ed., CRC Press, 2024).

- Provide supervised self-healing in cases where the analysis engine could determine an automated solution to prevent or mitigate a detected cyber security incident
- Provide the means for relevant groups to get cyber security-related information in order to help other organizations avoid or lessen similar incidents.³¹

But this requires collaborative effort from government, cyber security professionals, researchers, and industry stakeholders to make this project available for all startups and all size corporations. The government of India should start focusing on this approach by making investments in this projector in similar like projects to support the startups by providing safer cyber security environments.

Hence, to conclude it is to state that Strong cyber security is essential for startups not just to safeguard assets but also to guarantee long-term survival in a digital market. Startups must address cyber security due to the growing frequency and sophistication of cyber-attacks as well as the shortcomings of the existing legal and technological frameworks. This will necessitate a multipronged strategy that combines cutting edge technology solutions, such as artificial intelligence, with proactive legislative frameworks and enough funding.

Governments, company executives, and startups themselves need to work together to foster an atmosphere where cyber security is seen as a necessary, not optional, component of corporate operations. By doing this, entrepreneurs may flourish in a world that is becoming more linked, safeguard their inventions, and gain the trust of their clients.

³¹ Taylor & Francis, *A Cyber security Situational Awareness and Information-sharing Solution*, (Sept. 1, 2022), <https://www.taylorfrancis.com/chapters/oa-edit/10.1201/9781003337492-8/cybersecurity-situational-awareness-information-sharing-solution-local-public-administrations-based-advanced-big-data-analysis-cs-aware-project-thomas-schaberreiter-juha-r%C3%B6ning-gerald-quirchmayr-veronika-kupfersberger-chris-wills-matteo-bregonzio-adamantios-koumpis-juliano-efson-sales-laurentiu-vasiliu-kim-gammelgaard-alexandros-papanikolaou-konstantinos-rantos-arnolt-spyros>.

Privacy Paradox: User Privacy in Data-Driven Ecosystem Pharmaceutical Start-UPS

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Abstract: The capacity to control and protect one's personal information against disclosure or unauthorized access is known as privacy. Balancing user privacy and business needs has become an essential challenge in this ever-evolving technological terrain, as pharmaceutical start-ups are exposed to the dilemma that users' privacy should be very carefully taken into consideration while collecting their data. The first phase of this research paper explores the need for data collection in pharmaceutical start-ups as it gives information about the product being fit for the market and financial status and helps in planning for future endeavours in India. The second part of the paper explores the ethical ramifications of gathering data for pharmaceutical start-ups, emphasizing the conflict between upholding the right to privacy and its protection.

The final phase of this study examines how data privacy regulations impact startup innovation, considering existing regulations worldwide and the introduction of new data protection laws in India. The simultaneous stimulation and constraints put on the startups and hence, on the innovation due to the overall and sectoral regulations are widespread. This is where the delicate need to balance data privacy rights with freedom of innovation strikes. Therefore, the paper deals with the impact assessment of such regulations and how the pharmaceutical market reacts. This study aims to guide pharmaceutical startups in navigating this complex landscape, emphasizing the critical balance between privacy and progress, rendering privacy protection and propelling innovation.

Keywords: *Data Collection, Data Protection Regulations, Ethical Challenges, Pharmaceutical Start-Up, Market Impact*

Introduction

The world is now ruled by data¹. Data is used to predict consumer behavior, consumer choice, electoral behavior², and election outcome³. The need for data collection for pharmaceutical startups transcends strategic advantage and is a necessity. It is vital to understand the consumer behaviour, needs, and preferences, which aids in channelizing the action plan for the startups. The need of data collection for pharmaceutical startups transcends strategic advantage and is actually a necessity. The pharmaceutical industries is one of the emerging industries of innovation which feeds on reliable consumer data for growth and expansion. This paper traces this very need for data collection along with the types of data which is collected in pharmaceutical industries such as for regulatory compliance, clinical trials, market research, product development, and operational efficiency⁴. The scope of this paper extends to identifying the dynamic of the pharmaceutical startups and its data collection requirements and is limited to highlighting the impact of regulatory framework on such startups considering countries like US and Europe⁵. Finally, towards the end, the implications of Digital Personal Data Protection (DPDP) Act 2023 in India for startups both in India and abroad wanting to start business in the country on this sector of startups have been outlined along with suggestions for startups to protect their data from the competitors as well as customer data from unsolicited transfers or data leaks.

Research Questions

The present research paper delves and deals with the following research questions and aims to find plausible solutions to the challenges posed therein:

¹ Parveen, N., & Saifullah, M. (2021). Twitter and radio indicators of election outcomes: a study of Indian elections. *International Journal of Economics and Business Research*, 22(2-3), 278-289.

² Saifullah, M. (2019). Prime time news coverage and electoral harvest-a study of 2014 Indian general election. *International Journal of Business Forecasting and Marketing Intelligence*, 5(4), 424-432.

³ Saifullah, M., & Parveen, N. (2022). Big data, artificial intelligence and machine learning: a paradigm shift in election campaigns. *The new advanced society: Artificial intelligence and industrial internet of things paradigm*, 247-261.

⁴ Christopher Bret Alexander, *The General Data Protection Regulation and California Consumer Privacy Act: The Economic Impact and Future of Data Privacy Regulations*, 32 LOY. CONSUMER L. REV. 199 (2020).

⁵ Google Spain SL v. Agencia Española de Protección de Datos (AEPD) and Mario Costeja González, Case C-131/12, [2014] E.C.R. I-317.

- What are the types and need of data collection for pharmaceutical startups and in what ways do ethical considerations and data protection measures influence the data collection practices of pharmaceutical startups?
- What are the potential challenges and opportunities for pharmaceutical startups in highly regulated environments in terms of innovation, competition, and market positioning, compared to those in less regulated regions?
- How does the implementation of the DPDP Act 2023 in India affect the data management practices of pharmaceutical startups, particularly in terms of data security, patient privacy, and cross-border data transfers?

Need for Data Collection in Pharmaceutical Start-UPS

Pharmaceutical start-up companies' survival and success rate critically depends on understanding consumer preferences and their behaviours and needs.⁶ The precise and reliable data of customers regulates the business according to the customer's needs and expectations, which is crucial to making decisions for the company as this is its very foundation to sustain a business.⁷ This paper will guide us through the various methods that will help us efficiently acquire reliable consumer data to succeed in the pharmaceutical start-up business.

The pharmaceutical industry is tremendously complex and heavily regulated; therefore, there is a need to collect data for new ventures into this industry. Product development, compliance, and market strategy can be done for corporate growth driven by efficient data collection.

Here are the key areas as to why the collection of data in pharmaceutical companies plays a vital role:

- **Regulatory Compliance:** India has a Central Drugs Standard Control Organization (CDSCO), which lays down strict guidelines required by a new start-up pharmaceutical business. Similarly, the USA has the U.S. Food and Drug Administration (FDA). Data is a must for the recordkeeping of safety reports, efficacy studies, and clinical trials; all these would eventually be required to get regulatory permission.⁸
- **Clinical Trials:** For the invention of novel medications and to track the safety and effectiveness of these medicines, data collection is crucial

⁶ 54 Fed. Reg. I (1989), Friday, February 24, 1989, pages 7925 - 8180

⁷ Nancy J. Moore, *Forming Start-up Companies: Who's My Client?* 88 FORDHAM L. REV. 1699 (2020).

⁸ Mason Marks, *Automating FDA Regulation*, 71 DUKE L.J. 1207 (2022).

as these trials are done in phases that focus on safety, efficacy, and lastly focus on the comparative effectiveness of the medicine. These phases help monitor the effects and responses on the real-time patients and according to make adjustments to the dosing and design of the medication.⁹ The data collected during these trials will then help in deciding whether the study needs to be terminated or not.

- **Market research:** It involves understanding the competitive landscape, market demands, and patient demographics for new companies. These facts help businesses correctly position their products and identify any potential gaps in the market when data is compiled on them.
- **Product Development:** Data collection is also required to ensure that the novel drugs are safe and effective to use and meet the needs of the patients.¹⁰ The information about the side effects of the drugs and their reactions to other medications is crucial for the patient and assists in formulating and improving therapeutic formulations.
- **Operational Efficiency:** The significance of collecting data in the pharmaceutical industry is that it manages inventory systems, keeps the production process quite efficient, and equally distributes the work, which helps further in the timely and prompt delivery of goods and is cost-efficient.

One example of a pharmaceutical start-up in India is Mynvax. It was founded in 2021, had a focus on vaccination development, more particularly COVID-19 vaccines. By taking a data-driven approach, the organization navigates through the convoluted landscape of the pharma domain and deploys data to handle activities that involve regulatory compliance, clinical trials, market research, product development, and operational efficiency.

Types of Data Collected by Pharma Industries

- **Pharmacovigilance and Clinical Trials-** The data collected includes the health information of patients, the adverse incidents of medications, and the outcome of the treatments they are going through.¹¹ This helps to ensure the safety of the patients and if it is under the regulatory standards while monitoring the reactions and efficacy of the drugs.
- **Health Apps and Wearables-** The data from the apps/wearables reveal medication adherence, symptoms, physical activities, and vital signs,

⁹ Krishna Sarma & Manisha Singh, *Clinical Trials in India*, 2018 FDLI UPDATE 32 (2018).

¹⁰ *Supra* note 264.

¹¹ *Supra* note 264.

therefore, contributing to individual health management and treatment adjustments.

- **Medical and Genetic Research:** The information about patients that is gathered from research, genetic studies, and epidemiological studies gives real-world evidence by revealing information about the efficacy and safety of the drugs and their reactions on individual beings.¹²
- **Patient Support, Sales and Marketing:** It improves the management of patient support programs and analysis of the trend of prescriptions while enabling focused marketing. It ensures better access to medicines, adherence, and customized marketing tactics.
- **Data Security and Compliance:** Personal information must be safeguarded via the following, i.e., General Data Protection Regulation (GDPR) adherence, Health Insurance Portability and Accountability Act (HIPAA) compliance, and secure data transfer.¹³ This is a time for data privacy, sharing with third-party providers, and ensuring that healthcare providers and insurance claims support and reporting are accurate.

Ethical Collection of Data and its Protection in Pharmaceutical Startups

Making sure that pharmaceutical research studies are performed without violating patients' privacy, e.g., participating in such studies, depends mainly on data transparency. To start the ethical data collection process, individuals under research must be sought for informed consent.¹⁴ In other words, what information is being collected, why and by whom, and its risk must be clearly stated. The subjects should have voluntary provisions to discontinue these trials at any time without any impediments.

Strict procedures are in place to safeguard all the information concerning security and confidentiality. Data shall be anonymized or otherwise pseudonymized so that a person can no longer be identified from the data when it is disclosed to any third party, for example, by publication of research results.¹⁵ The nature of your database, alongside secure storage technologies and the proper encryption technology, will help you ensure that data does not leak or is accessed by an unauthorized user.

¹² James Watson, *No Restrictions on Genetic Research*, 22 NEW PERSP. Q. 54 (2005).

¹³ Larry Rosania, *Heparin Crisis 2008: A Tipping Point for Increased FDA Enforcement in the Pharma Sector*, 65 FOOD & DRUG L.J. 489 (2010).

¹⁴ Nicolas P. Terry, *Regulatory Disruption and Arbitrage in Health-Care Data Protection*, 17 YALE J. HEALTH POL'y L. & ETHICS 143 (2017).

¹⁵ Mike Hintze, *Privacy Statements under the GDPR*, 42 SEATTLE U. L. REV. 1129 (2019).

In doing so, it follows the HIPAA and GDPR. These requirements call for solid measures like regular audits and inspections to assure data security & privacy.¹⁶ Pharmacies should also have more defined processes for managing data during a breach, such as incident response plans and access controls. Ethical preservation includes accountability and transparency in gathering data. Companies need to make the privacy rules clear and inform participants how their data will be stored or whether it is sufficiently protected.¹⁷ Data scientists and everyone who plans to release data must adhere to various ethical standards associated with disclosing it without manipulation or harm.

MedGenome is one such example of an Indian pharmaceutical start-up that strongly believes in and practices privacy and ethical data collection. Founded in 2013, MedGenome works on precision medicine and genomic data research. Ensuring that the data collection process does not offend or infringe on ethical norms, it has set strict standards and rules that include obtaining informed consent, ensuring anonymity of data, and adherence to GDPR and HIPAA. It means they are serious about ethical research and the protection of the privacy of the patients by insisting on secure data processing and openness.

Ramification of Data Protection Regulations on Pharmaceutical Startups

Pharmaceutical startups are increasingly using data to enhance products and operations and develop new business models. However, the usage of personal data may collide with customer and employee privacy expectations. Data protection laws attempt to reconcile these issues by establishing standards for what businesses are permitted to do with data. Individuals' privacy views and the substantive content of data protection regulation (privacy law) differ significantly between countries.¹⁸ For instance, Europe has tougher and more structured data protection regulations in form of GDPR than the HIPPA of United States¹⁹ while India's DPDP Act²⁰ is still in its nascent stage.

¹⁶ Aliya Ramji , Deniz Tamer , Carina Barrera Cota , Renato Leite Monteiro , Caio Cesar C. Lima, Joseph Prestia & Kristina Subbotina, *Managing Big Data Privacy and Security*, 46 INT'L NEWS 1 (2017).

¹⁷ Patricia E. M. Covington & Meghan S. Musselman, *Recent Privacy and Data Security Developments*, 65 BUS. LAW. 611 (2010).

¹⁸ Nick Doty & Deirdre K. Mulligan, *Internet Multistakeholder Processes and Techno-Policy Standards: Initial Reflections on Privacy at the World Wide Web Consortium*, 11 J. oN TELECOMM. & HIGH TECH. L. 135 (2013).

¹⁹ Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191, 110 Stat. 1936 (codified as amended in scattered sections of 29 U.S.C. and 42 U.S.C.), Acts of Parliament (United States).

²⁰ General Data Protection Regulation of Europe), Regulation 2016/679, Acts of Parliament.

This includes the conditions under which companies can process data, what constitutes personal data, and who must be notified in the event of a data breach.

Competitive Disadvantage and Regulation

It can be argued that stringent regulations on data protection inhibits the startups by placing them at a competitive disadvantage to other already established companies, especially those operating within lesser regulated environments like the USA. *PharmEasy* and *1mg* are the Indian pharmaceutical startups which are navigating the regulatory landscapes facing challenges balancing compliance with innovation, compared to US startups. While HIPPA purports to protect health data but is lenient in other data use regulations, thereby giving a competitive advantage.²¹

Impact on Corporate Performance

Corporate performance can be impacted due to compliance costs which might divert resources from innovation. Startups like *Myra Medicines* which is heavily data driven startup being dependent on customer data to personalize and customize its offerings. Though, the regulations can drive the startups to mindfully invest in practices and technologies for protecting the sensitive customer data which helps in gaining customer trust. GDPR has spurred innovation in Europe²² with expected growth of pharma markets in Europe to USD 432.12 billion by the end of 2028.²³

Stifling innovation and propelling performance are two facets of data regulations. Increase in costs and entry barriers inhibit the pharmaceutical startups but at the same time, Indian startups like *Indegene* which is into healthcare solution business, have started developing compliance strategies to match global standards. Similarly, in Europe, pharmaceutical startups have had to innovate in response to the GDPR, creating new data anonymization techniques and secure data sharing platforms to comply with the law while continuing their research and development activities.²⁴ However, the adverse

²¹ Brandon David Lawniczak, *Substantiating Competitive Disadvantage Claims: A Broad Reading of Truitt*, 87 MICH. L. REV. 2026 (1989).

²² Eurodev, *Data Protection in the European Pharmaceutical Industry*, EURODEV, <https://www.eurodev.com/blog/data-protection-in-the-european-pharmaceutical-industry>, (last visited Dec. 21, 2024).

²³ Eurodev, *Expanding Your Reach in the European Pharma Industry with EuroDev*, EURODEV, <https://www.eurodev.com/lab-pharma-in-vitro-sales-europe>, (last visited Dec. 21, 2024).

²⁴ W. Gregory Voss & Hugues Bouthinon-Dumas, *EU General Data Protection Regulation Sanctions in Theory and in Practice*, 37 SANTA CLARA HIGH TECH. L. J. 1 (2021).

effects of regulation are also evident, such as the stifling of innovation in genetically modified organisms (GMOs) in the EU due to stringent regulatory controls.

Market Structures and Privacy Laws

Extensive privacy regulations may drive market structures to be oligopolistic by allowing only the established companies to thrive driving out the newer pharmaceutical startups²⁵. The already established companies have legal and policy structures in place and are in a better situation to combat and cope with the changing regulatory landscape.²⁶ However, those startups who are quick to adapt themselves to the regulatory environment can gain early advantage. For instance, *Netmeds* in India, which focuses on secure online medicine delivery, can leverage their compliance as a market differentiator, gaining a competitive advantage in a privacy-conscious market.

Protecting Data of Startups from Competitors

Essentially, there can arise situation wherein the data collected by startups can be leaked due to their inadequate infrastructure and policies.²⁷ This needs to be safeguarded from the competitors, fraudulent investors and pharmaceutical giants wanting to engulf the startups such as *Medlife* acquiring *Myra Medicines*. In these circumstances, regulatory framework helps in protecting such pharmaceutical from the clutches of these giants and frauds.

Impact of the DPDP Act on Pharmaceutical Startups

DPDP Act 2023 has brought about a range of opportunities and problems for Indian startups. The Act's effects can be understood in terms of the opportunities and problems it presents to marketers.²⁸ There are implementation issues for startups of different sizes due to the act's relatively complex and ambiguous language.

²⁵ Jay P. Kesan, Carol M. Hayes & Masooda N. Bashir, *Information Privacy and Data Control in Cloud Computing: Consumers, Privacy Preferences, and Market Efficiency*, 70 WASH. & LEE L. REV. 341 (2013).

²⁶ Nicholas A. Ashford & George R. Heaton, *Regulation and Technical Innovation*, 5 EPA J. 32 (1979).

²⁷ Yafit Lev-Aretz & Katherine J. Strandburg, *Privacy Regulation and Innovation Policy*, 22 YALE J.L. & TECH. 256 (2020).

²⁸ Christian Hofmann, *An Easy Start for Start-ups: Crowdfunding Regulation in Singapore*, 15 BERKELEY BUS. L.J. 219 (2018).

The Act has made it mandatory for the data fiduciaries²⁹ to obtain explicit consent under Section 4 and 6³⁰ for processing personal data³¹ therefore fostering trust of the patients even on startups encouraging an active participation of data principles. The Act can be instrumental in digital innovations by providing guidelines for letting the pharmaceutical startups leverage patient data for customized treatments and research. Section 3 outlines the Act's applicability, extending its reach to data processing within India and outside India if it pertains to offering goods or services to individuals in India, making compliance crucial for pharmaceutical startups operating globally. The Act imposes stringent requirements on the transfer of personal data outside India and restricts such transfers to countries or territories notified by the Central Government. Pharmaceutical companies engaged in cross-border data transfers for research, collaboration, or outsourcing activities will need to ensure compliance with these restrictions and may need to implement additional safeguards or seek regulatory approvals for data transfers to countries outside India.

Telemedicine, which surged during the pandemic, will be impacted by the Act's requirements for data encryption and compliance during telehealth consultations. The challenges include the requirement of consent management in cases of emergency wherein the accuracy³², security and compliance has to be ensured as per Section 4,6 and 8. Pharmaceutical industries also retain data for research, marketing, compliance etc,. But the Act mandates erasure of data upon request which requires framing of adequate data retention policies.³³

Section 4 mandates lawful data processing with consent, necessitating clear consent mechanisms. Section 6 emphasizes that consent must be free, specific, informed, and unambiguous, requiring startups to implement robust consent management systems. Section 7 details the responsibilities of data fiduciaries, urging startups to protect user data and maintain transparency. Section 8 mandates data breach notifications, requiring startups to have protocols for breach detection and reporting which could slow down research processes in pharmaceutical industry. Smaller firms may

²⁹ Digital Personal Data Protection Act, No. 22 of 2023, § 2(x), Acts of Parliament, 2023 (India).

³⁰ Digital Personal Data Protection Act, No. 22 of 2023, § 6, Acts of Parliament, 2023 (India).

³¹ Digital Personal Data Protection Act, No. 22 of 2023, § 2(k), Acts of Parliament, 2023 (India).

³² Digital Personal Data Protection Act, No. 22 of 2023, § 8(3), Acts of Parliament, 2023 (India).

³³ Digital Personal Data Protection Act, No. 22 of 2023, § 12, Acts of Parliament, 2023 (India).

struggle with compliance costs, potentially leading to market consolidation favoring larger companies with more resources. Section 13 outlines the rights of data principals, compelling startups to facilitate access, correction, and erasure of personal data. Pharmaceutical startups often engage third-party vendors and service providers for various data processing activities, such as clinical trials, drug development, and marketing campaigns and the Act necessitates data fiduciaries to ensure the processors are compliant with the data protection measures allocating responsibility on the startups. Finally, Section 33 discusses penalties for non-compliance, highlighting the importance of understanding and adhering to these regulations to build user trust and avoid legal risks which can amount to two fifty crores.³⁴

Conclusion

The viability of pharmaceutical startups is significantly impacted by their capacity to get and utilize patient data across various industry segments. We stress the value of data collection for the following purposes: improving product development and operational efficiency, conducting market research, progressing clinical trials, and maintaining regulatory compliance, all of which depend on frequent data collection. Data is required to abide by the rules established by agencies such as the FDA and CDSCO. Moreover, it significantly improves the product's position, overall operational performance, and safety in the market.

Several data sources are collected to advance the sector and ensure patient safety, from wearables and health applications to clinical trials and pharmacovigilance. Active ethical concerns entail informed consent and ways to implement robust measures for data protection under both GDPR and HIPAA, which instil confidence and protect patients' privacy.

Stricter rules on data protection, such as the GDPR in Europe and the DPDP Act in India, bring both opportunities and challenges to startups. While operational and compliance costs may rise, such regulations will force businesses to implement reasonable data management practices, which will then help companies differentiate in the market. Startups must handle these limitations carefully, finding a way to balance creativity and conformity.

Suggestions

- **Investing in Data Management Systems:** If startups invest in some of the advanced data management and analytics systems, they will be able

³⁴ Digital Personal Data Protection Act, No. 22 of 2023, Schedule, Acts of Parliament, 2023 (India).

to make quicker decisions based on information, such as investments related to compliance.

- Better Compliance Arrangements: Designing comprehensive compliance plans to tolerate local and global legislation can assist in reducing legal lash-backs, plus modifying regulations as data preservation rules work.
- Emphasize Ethical Data Techniques: Emphasize ethical data collection methods and transparency to make follow-up on privacy regulations possible and build consumer trust, which also matches international standards.
- Harness Legislative Changes: Make full use of new laws that would act as an impetus for innovation by developing secure platforms for the exchange of data or creative techniques for anonymization.
- India should introduce clearer data localization requirements which will help startups to ascertain their global outreach, as seen in Brazil's Lei Geral de Proteção de Dados (LGPD) since both the countries have emerging pharmaceutical startup market and although inspired by the GDPR, Brazil's LGPD has been tailored to fit the needs of an emerging economy.

13

Startup Performance: Legal Governance and Venture Capital Control

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Abstract: The post-COVID-19 economic surge has seen an influx of Start-ups in India, bolstered by government initiatives to foster innovation. Initially, Start-ups seek funding from Venture Capital (VC) firms, which conduct rigorous due diligence to assess growth potential and make informed investment decisions. Similarly, Private Equity firms play a crucial role in funding more mature Start-ups or businesses.

A critical aspect of VC and PE deals is governance and control, a highly negotiable area that, if improperly structured, can lead to liabilities and penalties. VC and PE firms not only provide capital but also technical, business, and management expertise, aiming to realize returns through various exit strategies such as IPOs, leveraged buyouts, and mergers and acquisitions. Founders, eager to regain control as their Start-ups grow, must navigate governance and control issues where VCs may seek veto rights to protect their investments.

This paper explores the legal dimensions of board composition, control mechanism and governance structures in Start-ups. It examines how board composition and responsibilities impact Start-up performance, what governance structures best protect VC investments, and how investment portfolios and fundraising strategies should align with balancing interests. Additionally, the study delves into the legal implications of protective provisions and minority rights in the context of VC investments. This study aims to provide insights into the delicate balance between VC control and Start-up growth.

Keywords: *Board Composition, Control, Governance, Start-Up Performance, Voting Rights*

Introduction

A start-up is an embryonic company in the early stages of its lifecycle, marked by innovation, risk-taking, and a focus on rapid growth and scalability. Venture capital funds are those firms which provide financial support in exchange of equity¹. Though it is very risky to judge the start-ups' accountability, transparency, and risk management in its nascent stage but one of the significant parameters is its governance structure. Governance is required not just to fulfil the regulatory compliance but also it helps in nurturing start-ups. In India, Start-ups which are recognized through DPIIT have significant benefits such as Tax exemption under *80IAC of Income Tax Act 1961*, Angel Tax Exemption under *Section 56*² (now under the Financial Budget of 2024, Angel tax has been removed with effect from April 2025).

In the dynamic world of Start-ups, securing funding is a crucial milestone that can make or break a venture. The journey from seed funding to exit is paved with various stages of financing, each with its unique challenges and opportunities. From pre-seed funding to Series C and beyond, Start-ups must navigate a complex landscape of investors, regulations, and control mechanisms. At the heart of this journey is the delicate balance of power between founders and investors, with control being a key issue that can shift significantly as external capital is raised. As Start-ups grow and scale, their governance structures evolve, with diverse board composition becoming essential for attracting venture capital. However, this also introduces potential conflicts of interest, particularly when venture capitalists take board seats. Effectively managing these risks requires a thorough understanding of the motivations and biases of board members, as well as the clear definition of roles and responsibilities.

This intricate equilibrium between Start-ups, investors, and regulators is fraught with challenges, but also offers opportunities for growth and innovation. By understanding the nuances of control, governance, and regulation, Start-ups can navigate this landscape successfully and achieve their full potential. In this context, the concept of control assumes paramount importance, with its interpretation having far-reaching implications for Start-ups, investors, and the broader venture capital ecosystem.

¹ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

² Income Tax Act, No. 43 of 1961, § 56.

Stages of Start-Up Funding

In the entrepreneurial journey, securing seed funding is vital as it provides the initial capital required to transform innovative ideas into tangible products and services. This early-stage financing lays the foundation for a start-up's growth, covering essential costs such as product development, team building, and operations. One interesting fact about Start-ups is that, about 60% of the companies that reach pre series A funding fail to make it to Series A, so success rate is only 30-40% and the reason could be attributed to the fact that there are no regulatory aspects in the seed funding.³

Pre-seed funding rounds is the foundational stage of venture capital that provides start-ups with the initial capital needed to validate their business ideas, conduct market research, and develop a minimum viable product (MVP). This stage is crucial for demonstrating potential to investors and securing future investments. Typically, funds are sourced from the founder's network, angel investors, or early-stage VCs.⁴ However, this stage often comes with significant equity dilution due to the high risks involved. Seed rounds, often structured as convertible debt or Simple Agreements for Future Equity (SAFEs), offer flexibility and simplicity, making them ideal for start-ups.⁵

Subsequent funding rounds, such as Series A, B, and C, build on this foundation by enabling start-ups to scale operations, refine products, and enter new markets. Series A focuses on optimizing product-market fit and establishing a revenue model, while Series B aims at scaling the business, expanding market reach, and solidifying a customer base. Series C and beyond are about accelerating growth, potentially acquiring other companies, and preparing for major liquidity events like an IPO, sale, buyouts or mergers and acquisitions. While these rounds provide the necessary capital for growth, they often demand more stringent performance metrics and involve less risk, attracting a broader range of investors.

The Bridge/Round D/Pre-IPO stage is crucial for companies preparing for an IPO or acquisition, with investors including hedge funds, investment banks, and private equity firms. In India, venture capital regulations outline exit mechanisms like IPOs, buybacks, strategic sales, and secondary market

³ Max Babych, *Start-up Failure Statistics by Industry and Stage* (2024), SPD LOAD, (Mar. 5, 2024), <https://spdload.com/blog/Start-up-success-rate/>.

⁴ Matt Preuss, *Seed Funding for Start-ups: Our Complete Guide*, VISIBLE, (Mar. 1, 2024), *Seed Funding for Start-ups: Our Complete Guide - Visible.vc*.

⁵ AMODA, *a Property and Construction Start-up, Raised Pre-Seed Funding Led by East Ventures, East Ventures*, (Jul. 8, 2022), <https://east.vc/news/press-release/amoda-a-property-and-construction-Start-up-raised-pre-seed-funding-led-by-east-ventures/>.

sales. The choice of exit depends on investment maturity, market conditions, and fund objectives.⁶

Venture capitalists face significant challenges in fund sourcing, including intense competition for high-quality investment opportunities, limited availability of promising Start-ups, and time constraints. Economic fluctuations further complicate investment decisions, while regulatory changes add layers of complexity. Limited funds heighten the pressure to make successful investments, necessitating careful deal flow management, often supported by technology platforms to streamline decision-making and improve outcomes.

Control Mechanism

Control is a key issue for start-ups and investors, often shifting when external capital is raised. Founders use mechanisms like dual-class stock and board control to retain influence, while investors may resist or impose guardrails to ensure disciplined management and protect their interests. Dual-Class Stock structure separates common stock into super-voting shares for founders and one-vote shares for investors, allowing founders to maintain control over major corporate decisions. This setup is generally implemented pre-IPO and is subject to various investor-imposed guardrails, such as termination of super-voting rights under specific conditions which affects their interests. The balance of power is typically negotiated, with context and market conditions influencing the outcome.

Over three decades of research⁷ on venture capital (VC) finance highlights the importance of control as a key feature. VCs manage risks and secure returns by actively engaging in the governance of their portfolio companies. Unlike other private equity investors, VCs typically share control rather than taking it outright. Decision-making authority is distributed among stakeholders based on measurable financial and non-financial performance indicators. Founders gain more decision-making power when companies perform well, while investors assume greater control when companies underperform.⁸ Building on Aghion and Bolton's framework, Kaplan and Strömberg's study of

⁶ Venture Capital Laws & Regulations in India, (Apr. 10, 2024), <https://burgeon.co.in/blog/venture-capital-laws-regulations-in-india/>.

⁷ Schmidt, Klaus M, *Convertible Securities and Venture Capital Finance*, The Journal of Finance, vol. 58, no. 3, (Jun. 2003), pp. 1139–66, <https://doi.org/10.1111/1540-6261.00561>.

⁸ Kaplan, Steven N., & Per Strömberg, *Financial Contracting Theory Meets the Real World: An Empirical Analysis of Venture Capital Contracts*, Review of Economic Studies (2003) 70, 281–315, <https://www.hhs.se/contentassets/662e98040ed14d6c93b1119e5a9796a4/kaplanstromberges2003-published-version.pdf>.

U.S⁹. VC agreements confirms that performance-based allocation of control rights effectively manages incentives and reduces moral hazard. VCs typically separate control from cash flow rights and adjust control based on performance, often using private agreements¹⁰. One of the principles in corporate law, one-share one-vote, asserts that each share should grant equal cash flow and control rights, aligning decision-making power with economic incentives. After extensively studying the statistics in listed company¹¹, its impact on non-listed, fast-growing companies with dynamic valuations and stakeholders remains less explored. The one-share one-vote rule, which aligns decision-making power with financial incentives, is being challenged in various jurisdictions, including Italy, Portugal, and Brazil, which have introduced or modified rules to allow multiple voting rights. This flexibility has proven beneficial in venture capital (VC) financing, where exceptions to the rule can facilitate efficient contracting and support the growth of VC markets.¹²

Companies Act, 2013 provides for the definition of ‘control’ which includes “the right to appoint majority of the directors or to control the management or policy decisions.”¹³ VCs control in Start-ups are similarly regulated by how voting and board representation rights are allocated among different classes of shares. VCs negotiate with entrepreneurs on these rights, often issuing “vote-less shares” for employees or using convertible-preferred stock (CPS) with enhanced voting rights to maintain control. Legal restrictions vary globally, affecting the flexibility of VC financing agreements. Some places have rules that only allow limits on share control for a short time or require extra benefits for shares with limits, making it harder to decide who controls the company. These different rules affect how well venture capital agreements work and which companies can get funding.¹⁴

⁹ Steven N. Kaplan & Per Strömberg, *Venture Capitalists as Principals: Contracting, Screening, and Monitoring*, 91 Am. Econ. Rev. 426 (2001).

¹⁰ Hellmann, Thomas, *IPOs, Acquisitions, and the Use of Convertible Securities in Venture Capital*, Journal of Financial Economics, vol. 81, no. 3, (Sept. 2002), pp. 649–79. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=257608.

¹¹ Easterbrook, Frank, & Daniel Fischel, *Voting in Corporate Law*, Journal of Law and Economics, vol. 26, no. 2, June 1983, <https://chicagounbound.uchicago.edu/jle/vol26/iss2/14>.

¹² Kraakman, Reinier et al, *The Anatomy of Corporate Law*, (Jan. 26, 2017), Oxford University Press, https://edisciplinas.usp.br/pluginfile.php/8490807/mod_resource/content/1/ARMOUR%20et%20al.%20The%20Anatomy%20of%20Corporate%20Law.pdf.

¹³ Saifullah, M., Iqbal, M. I., & Parveen, N. (2024). Challenges and opportunities within the evolving CSR landscape in India. *Technology-Driven Evolution of the Corporate Social Responsibility Ecosystem*, 46-60.

¹⁴ Broughman, Brian, *Independent Directors and Shared Board Control in Venture Finance*, 9 Review of Law and Economics 41 (2013), Jan. 2013, <https://www.repository.law.indiana.edu/facpub/2864>.

Contingent control is a conditional control mechanism that depends on specific circumstances and stakeholder interests. Given its importance in venture capital finance, regulations are necessary to balance investor protections, board powers, and start-up growth. Flexible voting shares and board structures can facilitate negotiations, but may add complexity. Shareholder agreements should not compromise legal protections or concentrate excessive control, ensuring transparency and director's accountability.

Governance Structures in VC-Backed Start-UPS

Start-ups having diverse board composition always flourish and adds more confidence for the Venture Capitals to infuse funds. A responsible investor always seeks the governance factor in the start-ups. A board is a team of people chosen to represent the interests of a company and its shareholders. This team is responsible for making sure the company is run in a fair and responsible way, following established rules and procedures. *Section 149 of the Companies Act, 2013* envisages that company must have a board of directors with a minimum of 2 directors and maximum 15.¹⁵

An effective board of a Start-up, as envisioned by Fred Wilson, partner at Union Square Ventures, typically comprises a diverse group of individuals. This includes the company's CEO, who may also be the founder, a seasoned financial investor, and two to three fellow CEOs who have successfully navigated the challenges of building and growing a company.¹⁶

Brad Feld, a renowned entrepreneur, author, and venture capitalist, further recommends that every Start-up board should also include at least one independent director, who brings an objective perspective, and ideally, the company's legal counsel. In terms of size, experienced professionals suggest that an ideal Start-up board should consist of three to five members, with five being the optimal number. This configuration allows for a balance of expertise, diverse perspectives, and effective decision-making.¹⁷

There are four legal principles of the corporate governance:

¹⁵ Saifiullah, M., Anchal, & Parveen, N. (2024). Brand Building Through CSR Initiatives During Hajj and Umrah: A Study of Tourism Industry. In *Corporate Social Responsibility, Corporate Governance and Business Ethics in Tourism Management: A Business Strategy for Sustainable Organizational Performance* (pp. 85-92). Emerald Publishing Limited

¹⁶ Gbadebo-Smith, Orinola, *Effective Start-up Boards: What They Are and How to Build Them*, <https://www.toptal.com/finance/venture-capital-consultants/building-effective-Start-up-boards#:~:text=According%20to%20Fred%20Wilson%2C%20partner,the%20process%20of%20building%20successful.>

¹⁷ Id.

1. Duty of Care.
2. Duty of Loyalty.
3. Duty of Confidentiality.
4. Duty of Disclosure.

Board directors of a Start-up, including investors, have a duty to be loyal and put the company's interests first. They are always guided by the fiduciary duty with the start-ups. This means avoiding any situation that could be seen as a conflict of interest, where personal interests might influence their decisions. However, a challenge arises when Venture Capital investors assume a seat on the board of directors. They have a responsibility to the Start-up's owners, but they also have a responsibility to their own investors. This can create a conflict, as their own interests might not always align with the Start-up's interest.

To avoid possible conflicts, it is essential to understand the motivations and biases of board members, especially VCs, and keep a close eye on their actions during their tenure on the board. It is always better to draft the roles and responsibilities very precisely so as to remove the future conflicts.

Interestingly, start-ups can also reap advantages from partnering with VCs, debunking the common perception that such relationships are solely contentious. VCs can play a significant role in shaping a Start-up's future. A great example of this is *Airbnb*.¹⁸ Initially, the company focused on short-term rentals, connecting travellers with available spaces. But with the guidance of their venture capitalists, Airbnb's vision expanded. They saw opportunities beyond short-term rentals and explored new areas like experiences, luxury rentals, and business travels. By tapping into their venture capitalists' expertise and insights, Airbnb successfully broadened its horizons, diversifying its revenue streams and cementing its position as a leading global hospitality platform. This transformation showcases the value of venture capitalist guidance in nurturing a Start-up's long-term strategic vision.

Shareholder Agreements and Investor's Voting Rights

This agreement is entered between Start-ups and the shareholders or investors. Shareholders' Agreements typically include standard clauses that require careful drafting and negotiation between start-up founders and investors to ensure precise terms and conditions. Some of them are:

¹⁸ Board Governance: *The Role of Venture Capitalists in Guiding Start-ups, Faster Capital*, (Jun.19, 2024), <https://fastercapital.com/content/Board-Governance--The-Role-of-Venture-Capitalists-in-Guiding-Start-ups.html#:~:text=By%20establishing%20a%20board%20of,pitfalls%20and%20make%20informed%20decisions.>

- Voting rights, where investors have a say in key matters.
- Board Representation, where investors get the seat in decision making process.
- Liquidation Preference, where it outlines the order of payment in case of liquidation or sale.
- Anti-Dilution Protection, which protects investors from dilution due to future funding rounds.
- Drag-Along, Tag-Along Rights, which allows majority shareholders to force minority shareholders to sell or buy shares.
- Exit Strategies, which defines conditions for IPO, merger, or sale as well as an option for the investor to realise their investment returns.

Usually, investors have some reserved matters which allow investors to block certain decisions, ensuring that their interests are safeguarded even if they are a minority. It is like a negative voting right or popularly known as veto rights. During exits, particularly initial public offerings (IPOs), it is essential to comply with SEBI's regulations, including the *Takeover Code*¹⁹, which necessitates several mandatory disclosures. The issue came up before the SEBI in the case of *SEBI vs Subhkam Ventures, 2011*²⁰ that whether *Takeover code*²¹ gets triggered if the shareholders have veto rights and whether the term 'control' under Regulation 2(e)²² includes negative voting rights. SEBI affirmed it but SAT observed that control must be construed as positive ones enshrined under the law. When this matter came up before Supreme Court, it neither upheld nor rejected SAT order. But in the subsequent case of *Arcelor Mittal India Pvt. Ltd vs Satish Kumar Gupta, 2018*²³, Supreme court was considering the same question but from the lens of section 29A of IBC that whether 'control' includes negative control. Here, they affirmed the observation of SAT in *Subhkam Ventures*²⁴ case.

Since the Supreme Court's stance suggests that negative control does not equate to actual control, VCs can leverage this in negotiations and regulatory

¹⁹ SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011, Gazette of India, No. LAD-NRO/GN/2011-12/24/30181, India (2011).

²⁰ Securities & Exch. Bd. of India v. Subhkam Ventures (I) Pvt. Ltd., Civ. App. No. 3371 of 2010.

²¹ SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011, regs. 3–4, Gazette of India, No. LAD-NRO/GN/2011-12/24/30181, India (2011).

²² SEBI (Substantial Acquisition of Shares and Takeovers) Regulations, 2011, regs. 2 (e), Gazette of India, No. LAD-NRO/GN/2011-12/24/30181, India (2011).

²³ Arcelor Mittal India Pvt. Ltd. v. Satish Kumar Gupta, (2019) 2 SCC 1

²⁴ Supra Note 313.

compliance, avoiding potential disputes. It empowers VC investors with knowledge about how their reserved matters and veto rights are perceived legally. It also allows them to make more informed decisions when drafting and negotiating investment agreements with the Start-ups and navigating regulatory landscapes, thus minimizing risks during exit.

Challenges and Conflicts

Start-ups face numerous challenges as they grow, particularly in balancing governance and control with the need for external funding. One major challenge is the potential conflict between founders and venture capital (VC) investors, especially as Start-ups progress through various funding stages. As investors inject capital, they often seek control or influence over key decisions, leading to a shift in power dynamics. This can create tension, especially when investors push for strategies that may diverge from the founders' vision. Additionally, the introduction of diverse board members, including investors, can lead to conflicting interests. Investors typically have fiduciary duties to their own backers, which may not always align with the best interests of the Start-up. This can result in governance challenges, where the board's decisions may be swayed by the need to protect investor interests rather than focusing on long-term growth and innovation.

Another challenge lies in the governance structures themselves. As Start-ups grow, their boards often expand to include more diverse members, which, while beneficial for attracting further investment, can also introduce complexity in decision-making. The presence of multiple stakeholders with varying objectives can lead to conflicts, particularly when venture capitalists occupy board seats. The challenge is compounded by the evolving regulatory landscape, where changes in laws or the introduction of new regulations can affect the balance of control between founders and investors.

Conclusion

Start-ups must adopt a proactive approach to governance. Clearly defining the roles and responsibilities of board members can help minimize conflicts. It is crucial to draft precise shareholder agreements that outline voting rights, board representation, and other key governance issues like exit obligations. Start-ups should also consider implementing dual-class stock structures, allowing founders to retain control while still attracting necessary capital. Additionally, maintaining open communication channels between

founders and investors can help align interests and ensure that decisions are made in the best interest of the Start-up's long-term success. Ultimately, to successfully navigate the intricate legal terrain, start-ups should remain vigilant about regulatory updates and consult with legal advisors, thereby ensuring compliance and safeguarding the interests of all stakeholders.

Impact of Securities Regulations on Startup Investment Strategies

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Abstract: In India's evolving financial ecosystem, the intersection of securities regulations and startup investment strategies is crucial. Startups rely on external investments for growth, but navigating complex securities regulations poses challenges that influence strategic decisions. This paper examines the impact of key legislative frameworks like the Companies Act, 2013, SEBI regulations, and the Startup India initiative on startup investment strategies.

Regulations ensure market integrity and investor protection but also impose compliance burdens that can deter investors. Key issues include compliance costs, disclosure requirements, and implications of SEBI regulations such as the ICDR Regulations and AIF Regulations. The paper also discusses SEBI's regulatory sandboxes and crowdfunding mechanisms, balancing investor protection with flexible fundraising for startups.

Additionally, the rise of digital assets and ICOs in India presents unique regulatory challenges. The paper proposes leveraging RegTech for efficient compliance, advocating for startup-friendly regulations, and fostering collaboration between regulators and startups to enhance investment attractiveness and ensure compliance, contributing to a sustainable startup ecosystem.

Keywords: *Securities Regulations, Investment Strategies, Digital Assets, Startups, RegTech.*

Introduction

Startups have to rely on external investments for growth, and they need to have investors to give these investments and "A significant way that companies raise funds is through issuing shares in the main market and inviting people

to become shareholders (going public)¹. This method of issuing securities of an enterprise is governed by the Securities Exchange Board of India. This paper examines different SEBI guidelines for IPO or SEBI guidelines for issue of shares in India in this blog. There are startups which would want to go public and in order to go public and become a listed company the company has to follow certain guidelines provided by SEBI.

Going public enables a company a chance to access a big pool of cash to expand the company, produce a product or even enter a brand-new market. This injection of capital provides the financial backing to execute effective growth plans. Here comes the role of investors where they can invest in startups for their own financial growth. The key issue includes compliance costs, disclosure requirements, and implications of different SEBI guidelines.

For investors and entrepreneurs to traverse India's startup investment and sustainable growth landscapes successfully, legal knowledge is essential. India's startup ecosystem has grown because to the government's "Startup India" initiative, which promotes creativity and entrepreneurship. Comprehending the legal features is essential to guaranteeing adherence, reducing potential hazards, and enhancing the influence of financial commitments.²

The Securities and Exchange Board of India (SEBI) has established a regulatory sandbox framework to promote innovation in the securities market.³ This initiative allows firms to test new products and services in a controlled environment under SEBI's supervision. The use of sandbox technology in the securities market would aid FinTech in a number of ways and give SEBI the chance to create regulations that align with best practices in the industry and comprehend how innovations work.⁴ This would give companies a chance to experiment with new technologies in a controlled environment and, hence, regulatory standards would be maintained. This real-world testing platform helps SEBI understand emerging technologies better and, in turn, the regulations developed are aligned with the best practices in the industry and effectively respond to the complexity of new financial innovations.

¹ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

² Sagar Aggarwal, Legal aspects of sustainable growth and impact of investing in startups, FirstPost, (Aug. 09, 10:41 PM), <https://www.firstpost.com/business/legal-aspects-of-sustainable-growth-and-impact-of-investing-in-startups-13751067.html>

³ Securities and Exchange Board of India, *Framework for Regulatory Sandbox*, SEBI/HO/MRD2/DSAP/CIR/P/2020/85 (June 17, 2020), https://www.sebi.gov.in/legal/circulars/jun-2020/framework-for-regulatory-sandbox_46778.html

⁴ Anand Singh, *Understanding the SEBI Sandbox regulation Framework*, ipleaders, (Aug. 10, 2:57 PM), <https://blog.ipleaders.in/understanding-sebi-sandbox-regulation-framework/>

RegTech, or regulatory technology, is the term for the application of technology to address regulatory challenges and compliance requirements within regulated sectors, particularly in the financial industry. Examples of this technology include blockchain artificial intelligence and machine learning big data analysis, and cloud tech are changing things⁵. New studies show that financial firms and other industries will spend 124% more on RegTech worldwide from 2023 to 2028. And that's probably the most impressive statistics we've ever seen!⁶

Startups can use RegTech platforms to ensure they meet SEBI's disclosure requirements, such as those outlined in the ICDR (Issue of Capital and Disclosure Requirements) Regulations. RegTech evens out the competition by giving SMEs budget-friendly and flexible options. For example, RegTech platforms in the cloud let companies use compliance tools through subscriptions. This means they don't need to spend a lot upfront on software and equipment. By making compliance tech available to everyone smaller businesses can follow the rules without spending too much money.⁷ This paper also creates comprehensive guides that outline the processes startups need to follow to comply with specific SEBI regulations.

Impact of SEBI Regulations Including AIF & ICDR Regulations

Indian startups have to follow several SEBI rules when they raise money. These rules come from two places: the SEBI (Alternative Investment Funds) Regulations 2012, and the SEBI (Issue of Capital and Disclosure Requirements) Regulations 2018. These rules have an impact on how startups get funding. They're in place to keep investors safe and to make sure the whole process of getting money is clear and open.

SEBI AIF Regulations, 2012

The AIF Regulations govern the registration, operation, and investment processes for venture capital funds. Key compliance requirements include:

⁵ Safiullah, M., & Parveen, N. (2022). Big data, artificial intelligence and machine learning: a paradigm shift in election campaigns. *The new advanced society: Artificial intelligence and industrial internet of things paradigm*, 247-261.

⁶ Daniel Bedford, *Regtech Spend to Surge to \$207bn by 2028, as AI and ML Unlock Efficiencies*, Juniper Research, (Aug 10. 2:22 PM), <https://www.juniperresearch.com/resources/infographics/regtech-spend-to-surge-ai-machine-learning/>

⁷ Shilpa Dhobale, *Revolutionising Compliance: The Role Of RegTech In Reshaping India's Regulatory Landscape*, News18, (Aug. 10, 3:06 PM), <https://www.news18.com/business/revolutionising-compliance-the-role-of-regtech-in-reshaping-indias-regulatory-landscape-8645348.html>

- Sponsors/managers shall have a certain perpetuating interest in the AIF, ranging from 2.5% to 5% of the corpus depending on the AIF category.⁸
- While Category III AIFs can be either open-ended or closed-ended, Category I and II AIFs must be close-ended and have a minimum term of three years.⁹
- AIFs must adhere to investment conditions specified in the regulations based on their category.¹⁰
- AIFs must submit quarterly or monthly reports to SEBI on their investments and activities.¹¹

SEBI (Issue of Capital and Disclosure Requirements) Regulations, 2018

The ICDR Regulations outline the requirements for public offerings, including initial public offers (IPOs). Startups planning to raise funds through public offerings must comply with these regulations. Key aspects include:

- Startups must meet eligibility criteria such as net tangible assets or operating profit requirements to qualify for IPOs.¹²
- QIBs (including AIFs) are allocated a significant portion of IPO shares, and startups must adhere to QIB allocation rules.¹³
- Startups must make disclosures specified in the ICDR Regulations in their offer documents.¹⁴

To sum up, SEBI's AIF Regulations and ICDR Regulations play a key role in influencing how Indian startups obtain and handle investment funds. These frameworks are created to protect investor interests and uphold financial market integrity by implementing strict compliance requirements and promoting transparency.

SEBI (AIF) requires stringent norms, high net worth criteria in investors, and detailed reporting over compliance that can be prohibitively costly for early-stage ventures. These conditions notwithstanding, aimed at protecting the rights of investors, more frequently limit the ability of the small startup to access flexible and scalable funds, thereby stifling further innovation and

⁸ Frequently asked questions (faqs). Available at: https://www.sebi.gov.in/sebi_data/attachdocs/1471519155273.pdf (Last visited: 10 August 2024).

⁹ *Ibid*

¹⁰ *Id*

¹¹ *Id*

¹² Sharma, V. et al. (2023) *SEBI proposes key changes to the AIF regime, Lexology*. Available at: <https://www.lexology.com/library/detail.aspx?g=f0b0fbc9-b35c-4cd6-9b19-841b64e7ff7a> (Last visited: 10 August 2024).

¹³ *Ibid*

¹⁴ *Id*

growth.¹⁵ Although vital for safeguarding investors and maintaining market transparency, these regulations can pose significant challenges and expenses for startups, potentially hindering their ability to efficiently secure capital.

It is important to find a middle ground between strong investor protection and the necessary flexibility to promote innovation and entrepreneurial development as India's startup ecosystem expands and changes. Continuing communication between regulators and startups, along with careful regulatory changes, is crucial for creating a vibrant and long-lasting investment atmosphere that supports the success of startups while also ensuring market stability.

Crowdfunding Mechanisms and SEBI Guidelines

Using the combined efforts of friends, family, clients, individual investors, and others, crowdfunding is a method of obtaining capital to support initiatives and enterprises. This strategy leverages the networks of a huge number of people in order to increase reach and exposure. It does this mostly online using social media¹⁶ and crowdfunding platforms.¹⁷

The antithesis of traditional financing techniques is crowdfunding, which involves a project or company raising money from a small, chosen group of people or organizations. Alternatively, you can use crowdsourcing to raise capital from private investors who are prepared to support your project or business with a one-time or recurring donation. The size of these contributions can vary greatly, based on the prospective return and the nature of the project or business. Through crowdfunding, business owners and project initiators can take advantage of the internet's reach to raise capital for a variety of goals, including launching a new venture, creating a new product, promoting a cause, or providing aid to those in need.

Digital equity crowdfunding in India is now governed by regulations that are “illegal, unregulated, and unlawful,” according to the Securities and Exchange Board of India (SEBI).¹⁸

¹⁵ Securities and Exchange Board of India, *SEBI (Alternative Investment Funds) Regulations, 2012* (last amended Feb. 7, 2023), https://www.sebi.gov.in/legal/regulations/feb-2023/securities-and-exchange-board-of-india-alternative-investment-funds-regulations-2012-last-amended-on-february-07-2023-_69231.html.

¹⁶ Parveen, N., & Safiullah, M. (2021). Twitter and radio indicators of election outcomes: a study of Indian elections. *International Journal of Economics and Business Research*, 22(2-3), 278-289..

¹⁷ Safiullah, M., Pathak, P., & Singh, S. (2016). Emergence of social media and its implications for public policy: A study of Delhi assembly election 2013. *Management Insight*, 12(1), 1-6.

¹⁸ Securities and Exchange Board of India, Press Release, SEBI Cautions Investors (Aug. 30, 2016), https://www.sebi.gov.in/media/press-releases/aug-2016/sebi-cautions-investors_33094.html

This notice specifically mentioned platforms such as Grex, LetsVenture, Termsheet, Equity Crest, and Tracxn, stating that these electronic platforms facilitating fundraising on digital platforms were neither authorized nor recognized under any law governing the securities market.¹⁹ An estimated 200 organizations have raised between INR 35,057,840 and INR 45,074,366 on these stages over the previous 18 months, based on industry estimates.²⁰

Hence, the regulatory sandboxes and crowdfunding methods established by SEBI aim to achieve a balance between investor protection and innovation promotion. Startups can test new ideas in a secure setting with regulatory oversight thanks to sandboxes, while crowdfunding regulations guarantee that fundraising is done openly and with the right protections for investors. This dual strategy preserves the essential investor safeguards while fostering innovation and the expansion of startups in India.

Comparison Between India and Singapore's Crowdfunding Mechanism

India (SEBI)

SEBI continues to classify the equity-based crowdfunding platforms as “unauthorized, unregulated, and illegal”²¹ and maintains cautious stand from the point of view of investor protection and even misuse, which has stopped equity crowdfund entirely in this country.²²

Monetary Authority of Singapore

“In contrast, Singapore has developed a friendly regulatory framework for crowdfunding. Crowdfunding activities are regulated by the Monetary Authority of Singapore under the Securities and Futures Act and the Financial Advisers Act. The Monetary Authority of Singapore has implemented a licensing regime for crowdfunding platforms; they need to acquire a Capital Markets Services license in order to operate. It balances the investor protection objective with promoting alternative financing routes for start-ups and SMEs.”²³

¹⁹ Shailesh Menon, *Crowd Control: SEBI Warning Turns Off Crowdfunding Tap for Startups*, ECON. TIMES (Sept. 7, 2016), <https://economictimes.indiatimes.com/small-biz/money/crowd-control-sebi-warning-turns-off-crowdfunding-tap-for-startups/articleshow/54202702.cms>.

²⁰ *ibid*

²¹ *supra note 331.*

²² Securities Exchange Board of India Act, 1992: Securities and Exchange Board of India Act, No. 15 of 1992, INDIA CODE (1992)

²³ Brock Murray, "New Licensing Regime Outlined for Singapore Crowdfunding," Katipult Insights (May 2016), <https://www.katipult.com/insights/new-licensing-regime-outlined-for-singapore-crowdfunding> (last visited Dec. 23, 2024).

India's outright prohibition overlooks the potential of structured regulation to mitigate risks like misuse while fostering innovation and economic development, highlighting the urgent need for reform.²⁴

Role of Regulatory Technology in Solving Compliances

RegTech, or regulatory technology, is a rapidly evolving sector within the financial technology (fintech) landscape that focuses on using technology to help businesses comply with regulatory requirements efficiently and effectively. Its role is particularly crucial for startups navigating the complex regulatory environment surrounding investment strategies, especially in compliance with securities regulations.

Role of Automating RegTech in Compliance:

Some solutions through RegTech platforms enable easier streamlining of the compliance processes for the start-up businesses. There is AxiomSL and ComplyAdvantage, for example, focused on compliance monitoring in such areas like transaction monitoring and reporting according to current regulation requirements.²⁵ Some essential tools for the proper assessment of risk include OneTrust, TrustArc, with tools such as KYC-Chain for verifying the identity and risk assessment from various information.

These platforms can be integrated into operations by defining specific compliance needs, automating data collection and reporting, and ensuring continuous monitoring through real-time alerts. By leveraging these technologies, startups can improve regulatory adherence and reduce operational risks while gaining insights to refine their strategies.²⁶

Live Monitoring and Reporting

RegTech tools enable real-time monitoring of compliance with securities regulations. Startups can utilize these technologies to track their adherence to various laws and regulations, such as the SEBI (Securities and Exchange Board of India) guidelines for capital raising. For instance, automated systems can notify startups of any changes in regulations that may affect their

²⁴ *ibid*

²⁵ ComplyAdvantage, *Anti-Money Laundering (AML)*, (last visited Dec. 23, 2024), <https://complyadvantage.com/solutions/aml-compliance/>

²⁶ Cyvatar (2022) *Regtech – compliance and cybersecurity: The new it paradigm*, CYVATAR AI. (last visited: 10 August 2024) Available at: <https://cyvatar.ai/regtech-compliance-regulations-for-startups/>.

investment strategies, ensuring they remain compliant without extensive manual oversight.^{27 28}

Cost Efficiency

Implementing RegTech solutions can lead to significant cost savings for startups. Traditional compliance methods often require substantial resources, both in terms of personnel and technology infrastructure. RegTech offers scalable solutions, often available on a subscription basis, which democratizes access to compliance tools for small and medium-sized enterprises (SMEs). This affordability allows startups to maintain compliance without incurring prohibitive costs, thus fostering innovation and growth.^{29 30}

Enhanced Data Security and Risk Management

As startups handle sensitive financial data, RegTech also plays a crucial role in ensuring data security and managing risks. With increasing regulatory scrutiny on data protection, RegTech solutions help startups implement robust cybersecurity measures to safeguard client information and comply with data privacy regulations. This capability is essential for maintaining investor trust and meeting compliance obligations related to data handling and reporting.^{31 32}

Compulsion to Follow RegTech Guidelines

The necessity for startups to adopt RegTech solutions is underscored by the increasing complexity and frequency of regulatory changes. With an average of 220 regulatory updates per day, as reported in recent studies, staying compliant has become a daunting task for startups lacking adequate resources.³³ Non-compliance can result in severe penalties, including fines and reputational damage, which can be particularly detrimental for emerging businesses.

²⁷ Haris, M. and Dhobale, S. (2023) *Revolutionising compliance: The role of Regtech in reshaping India's regulatory landscape*, News18. (Last visited: 10 August 2024), <https://www.news18.com/business/revolutionising-compliance-the-role-of-regtech-in-reshaping-indias-regulatory-landscape-8645348.html>

²⁸ Dhobale, S. (2023) *Regtech compliance solutions*, Huntsman. (Last visited: 10 August 2024), Available at: <https://huntsmansecurity.com/resource/solutions/regtech-compliance-solutions/>

²⁹ *supra* note 4, at 2.

³⁰ ComplyLog (2024) *Regtech for compliance? here is why it is so popular*, Blog. (Last visited: 10 August 2024). Available at: <https://blog.complylog.com/regtech-compliance>.

³¹ *supra* note 317

³² *supra* note 321

³³ *supra* note 317.

Furthermore, as regulators continue to evolve their expectations, startups that fail to implement effective compliance measures risk falling behind their competitors who leverage RegTech for operational efficiency and risk mitigation. The growing emphasis on compliance in investment strategies makes it imperative for startups to adopt RegTech solutions not only to meet current obligations but also to stay ahead of future regulatory developments.³⁴

In summary, RegTech significantly enhances startup investment strategies by automating compliance processes, enabling real-time monitoring, and providing cost-effective solutions. By improving data security and facilitating better regulatory relationships, RegTech not only helps startups meet their compliance obligations but also positions them for growth and success in a competitive market. As regulatory environments continue to evolve, the integration of RegTech will be essential for startups aiming to navigate these complexities effectively.

A Roadmap for Startups Seeking Investors

“For accessing angel fund investments, the startup must meet eligibility criteria such as not being associated with industrial groups whose turnover exceeds INR 300 crore and adhering to the investment thresholds as notified by SEBI. The clear roadmap helps a startup prepare for the regulatory landscape better, reducing the risk of non-compliance.”³⁵

Indian startups have to face various compliance requirements to operate legally and effectively. They must first identify the appropriate business structure that should be either a Private Limited Company, LLP, or Partnership Firm, which, of course, are bound by specific rules and regulations under the Partnership Act 1932 or Companies Act, 2013^{36, 37}.

Subsequent to this, registration under the Ministry of Corporate Affairs, MCA, will also be required. Getting enrolled under the Startup India Initiative offers a host of other benefits like exemptions on taxes and schemes

³⁴ *supra* note 324.

³⁵ SEBI Regulations for Angel Fund Investments in India," *Treelife Blog* (last visited Dec. 23, 2024), <https://treelife.in/startups/sebi-regulations-for-angel-fund-investments-in-india/>.

³⁶ Saifullah, M., Iqbal, M. I., & Parveen, N. (2024). Challenges and opportunities within the evolving CSR landscape in India. *Technology-Driven Evolution of the Corporate Social Responsibility Ecosystem*, 46-60.

³⁷ Saifullah, M., Anchal, & Parveen, N. (2024). Brand Building Through CSR Initiatives During Hajj and Umrah: A Study of Tourism Industry. In *Corporate Social Responsibility, Corporate Governance and Business Ethics in Tourism Management: A Business Strategy for Sustainable Organizational Performance* (pp. 85-92). Emerald Publishing Limited.

running from the government. Sector-specific licenses must also be obtained relevant to the start-up's operation.

A food business would require an FSSAI license, for example. Labor laws need to be followed: these include the rights of employees, minimum wages, and other regulations that ensure safety at the workplace. Also, registration or compliance with tax authorities are essential; one of those includes getting a PAN Card, registration for Goods and Services Tax if turnovers exceed a certain threshold, as well as following TDS conditions. Keeping accurate account and carrying out frequent auditing help maintain transparency and abide with law. Non-compliance leads to legal penalties, reputational damage, and operational disruptions, highlighting the need for startups to be diligent with these regulatory requirements.

For instance, companies like Zomato and Nykaa have successfully navigated through the changing regulations of SEBI to make their respective IPOs. These startups adopted strategic approaches like proper documentation and proactive communication with the regulatory bodies, which helped them address the compliance issues in an efficient manner.³⁸

Conclusion

India's dynamic economic landscape reflects the complex relationship between regulatory frameworks and startup investment strategies. Startups, important to economic growth and innovation, are increasingly dependent on foreign investment to drive their development. However, navigating the complex web of security regulations is a major challenge that affects strategic decisions and their growth.

The Companies Act, 2013, SEBI regulations and the Startup India initiative form the backbone of India's regulatory environment for startups. While these rules are designed to protect investors and ensure market integrity, they also impose compliance costs and strict disclosure requirements that burden new businesses. The SEBI (Alternative Investment Funds) Regulations, 2012³⁹, and the SEBI ICDR Regulations, 2018, are particularly noteworthy for their role in shaping capital-raising processes. These regulations mandate detailed compliance measures, which, while ensuring transparency and investor protection, can also deter potential investors due to the complexity and costs involved.

³⁸ Start-up IPOs: SEBI's Continued Efforts to Empower Investors," *Business Today* (Jan. 16, 2024), <https://www.businessstoday.in/latest/corporate/story/start-up-ipos-sebis-continued-efforts-to-empower-investors-413468-2024-01-16>

³⁹ *Regulatory Framework for Social Stock Exchange*, (Last visited: 10 August 2024), https://www.sebi.gov.in/sebi_data/meetingfiles/feb-2022/1645691296343_1.pdf

Crowdfunding has emerged as an alternative fundraising mechanism, offering startups a platform to raise capital from a diverse group of investors. However, SEBI's cautious approach to crowdfunding underscores the need for a balanced regulatory framework that safeguards investors while fostering innovation. "Crowd fund is emerging as an integral alternative source of funding that a startup can use as means of tapping into a disparate group of investors. Again, SEBI has had to tread with caution balancing and regulating the requirement of shielding the investor with the overall thrust on innovation. Current regulations restrict retail investor investment to ₹60,000, which some suggest must be increased to ₹1,00,000 for better access to capital by startups. The emergence of digital assets and ICOs also poses new regulatory hurdles that need clear guidelines in order not to stifle innovation. A forward-looking regulation approach is necessary to catch up with technological changes while stabilizing the market."⁴⁰

The introduction of RegTech into the compliance landscape represents a revolutionary opportunity for startups. By leveraging technologies such as AI, machine learning⁴¹, and blockchain, RegTech can streamline compliance processes, enhance data security, and reduce costs.

Collaboration between regulators and startups is essential to develop frameworks that accommodate new business models and technologies without compromising investor protection. Legal sandboxes, for example, are an effective way to allow startups to test innovative ideas in a controlled environment, allowing managers to understand new technologies and changing regulations.

Startups must navigate complex regulations and use innovative technologies like RegTech to manage compliance. By promoting regulatory compliance and encouraging regulatory innovation, India can increase the attractiveness and stability of its financial ecosystem and ultimately support a vibrant and robust startup sector.

⁴⁰ Securities and Exchange Board of India, *Circular on Regulatory Framework for Equity and Debt Crowdfunding Platforms*, SEBI/HO/IMD/DF3/CIR/P/2014/23 (Mar. 18, 2014), https://www.sebi.gov.in/sebi_data/attachdocs/1403005615257.pdf

⁴¹ Safiullah, M., & Parveen, N. (2022). Big data, artificial intelligence and machine learning: a paradigm shift in election campaigns. *The new advanced society: Artificial intelligence and industrial internet of things paradigm*, 247-261.

15

The Regulatory Maze: Legal Challenges for Startups Seeking Venture Capital

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Venture Capital & Startups – An Introduction

Venture capital (VC) is a type of private equity used to support startups and early-stage companies with the potential for substantial and rapid growth¹. These investments are typically made in exchange for equity, or ownership stakes, in the companies they invest in. Venture capital is crucial for startup growth and innovation for several reasons:

Venture capital plays a crucial role in supporting startups by providing essential funding for innovation, including research, development, and market expansion. Beyond financial support, venture capitalists offer valuable expertise, mentorship, and strategic guidance to help startups manage their inherent risks.² They also bring extensive networks of industry connections and potential investors, which can be instrumental in establishing market presence and securing additional funding. Moreover, obtaining venture capital serves as a strong endorsement of a startup's potential, enhancing its credibility and attracting further investment.

¹ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

² Nishith Desai Associates, *Private Equity and Private debt Investment in India , Regulatory Legal and Tax Overview*, (October 2023) https://www.nishithdesai.com/fileadmin/user_upload/pdfs/Research_Papers/Private_Equity_and_Private_Debt_Investments_in_India.pdf

A startup is essentially an entrepreneurial venture in its early stages of operation, typically backed by its founders who drive its vision and growth.³ According to the Department for Promotion of Industry and Internal Trade (DPIIT), an entity qualifies as a startup in India if it meets specific criteria⁴, which include being incorporated within the last 10 years as a private limited company under the Companies Act, 2013, a partnership firm under Section 59 of the Partnership Act, 1932, or a limited liability partnership (LLP) under the Limited Liability Partnership Act, 2008. Additionally, the entity's turnover should not exceed INR 100 crore for any financial year since incorporation^{5ab}

The Role of Venture Capital in Startup Growth

Venture capital (VC) is a critical source of funding for startups, particularly those with high-growth potential.⁶ It involves selling ownership stakes to a select group of investors, commonly known as limited partnerships (LPs). This form of investment is often the first substantial external funding that a startup receives after initial seed investments or angel investments. The significance of venture capital lies in its ability to provide the financial resources necessary for startups to scale their operations, enter new markets, and develop innovative products.

Startups generally opt for venture capital because they often lack the operating history or collateral necessary to secure traditional bank loans or raise capital in public markets. In exchange for taking on the high risk associated with investing in startups, venture capitalists typically gain significant control over management decisions and a considerable equity stake in the company. This trade-off is crucial, as it not only provides the necessary capital but also brings strategic guidance and expertise from seasoned investors, which can be invaluable in navigating the complexities of scaling a startup.

³ Nishith Desai Associates, *Private Equity Investment in Indian Companies*, (April 2013) https://www.nishithdesai.com/fileadmin/user_upload/pdfs/Research%20Papers/Private_Equity_Investments_In_Indian_Companies.pdf

⁴ Startup India, *Startup Recognition Page*, https://www.startupindia.gov.in/content/sih/en/startupgov/startup_recognition_page.html (last visited Dec. 23, 2024).

^{5a} Saifullah, M., Anchal, & Parveen, N. (2024). Brand Building Through CSR Initiatives During Hajj and Umrah: A Study of Tourism Industry. In *Corporate Social Responsibility, Corporate Governance and Business Ethics in Tourism Management: A Business Strategy for Sustainable Organizational Performance* (pp. 85-92). Emerald Publishing Limited.

^{5b} Saifullah, M., Iqbal, M. I., & Parveen, N. (2024). Challenges and opportunities within the evolving CSR landscape in India. *Technology-Driven Evolution of the Corporate Social Responsibility Ecosystem*, 46-60.

⁶ Supra Note 358.

Startup & Venture Capital Ecosystem in India

India's startup ecosystem has experienced exponential growth over the past decade, making it one of the largest and most dynamic in the world. The country is home to more than 1,12,718 startups⁷, positioning it as the third-largest startup ecosystem globally, trailing only the United States and China.

⁸This rapid expansion is not just a reflection of entrepreneurial spirit but is also driven by India's robust economic performance. For instance, in the second quarter of FY24, India's GDP grew by 7.6%, surpassing the Reserve Bank of India's (RBI) projection of 6.5%, signaling a strong and stable macroeconomic environment conducive to business growth⁹

India's startup ecosystem and venture capital landscape have grown hand-in-hand, fueled by economic stability, regulatory support, and a focus on technology-driven innovation.¹⁰ As startups continue to proliferate, the availability of venture capital and private equity has become increasingly crucial in supporting their growth, enabling them to scale operations, enter new markets, and contribute to India's position as a global center for innovation.

Venture Capital Compliance

Venture capital funding, critical for startups at various stages of growth, comes with additional compliance demands. Under SEBI regulations, startups must comply with guidelines related to private placements, equity issuance, and disclosures.¹¹ These include providing detailed financial statements, business descriptions, and management profiles. Startups must also disclose risk factors, the intended use of proceeds, and investor rights associated with securities issued. For startups seeking foreign investments, compliance

⁷ Press Information Bureau, *Sustained Efforts by the Government Lead to Sustained Job Creation, Significant Economic Impact* (Dec. 23, 2024), <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2002100>.

⁸ Times of India , *India Becomes Third Largest Startup Ecosystem in the World*, (Aug. 21, 2021), <https://timesofindia.indiatimes.com/business/india-business/india-becomes-third-largest-startup-ecosystem-in-the-world/articleshow/85871428.cms>.

⁹ Nemesisa Ujjain, *Navigating India's entrepreneurial ecosystem: Insights for foreign startups*, The Economic Times, (Mar 08, 2024) <https://economictimes.indiatimes.com/small-biz/entrepreneurship/navigating-indias-entrepreneurial-ecosystem-insights-for-foreign-startups/articleshow/108316999.cms?from=mdr>

¹⁰ Alka Jain, *From 2014 to 2023: How the startup ecosystem is thriving in India despite all odds? Explained*, Mint, (Jan 18, 2024) <https://www.livemint.com/companies/start-ups/from-2014-to-2023-how-the-startup-ecosystem-is-thriving-in-india-explained-1170554773733.html>

¹¹ Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, No.SEBI/LAD-NRO/GN/2015-16/013, https://www.sebi.gov.in/legal/regulations/jul-2024/securities-and-exchange-board-of-india-listing-obligations-and-disclosure-requirements-regulations-2015-last-amended-on-july-10-2024-_84817.html

with FEMA and RBI guidelines must be clearly outlined. Additionally, SEBI mandates periodic disclosures of material changes, significant transactions, and ongoing legal disputes. Startups must also adhere to governance norms, including reporting board decisions and related-party transactions.¹² For startups that seek to raise funds through multiple rounds, such as Series A, B, or C, the complexity of compliance increases, requiring meticulous adherence to legal and financial due diligence processes¹³.

The regulatory framework for startups, while necessary for governance and investor protection, often poses significant challenges. The need to navigate multiple legal frameworks—from company law to FDI regulations—can be daunting for startups, particularly those in their early stages. Compliance with labor laws, tax regulations, and sector-specific guidelines adds further layers of complexity. Moreover, the various compliance requirements related to investment, particularly from foreign sources, can be overwhelming, requiring careful planning and strategic management.

The Complexity of Venture Capital Regulations in India

The venture capital (VC) ecosystem in India is characterized by a complex regulatory framework¹⁴ that often poses significant challenges for investors looking to fund startups. This complexity is driven by multiple layers of legal requirements and compliance mandates that can deter both domestic and foreign venture capitalists from investing in Indian startups. The intricate nature of these regulations not only makes it difficult for VC funds to operate efficiently but also limits the potential for startups to attract much-needed capital.

The regulatory environment in India, while designed to protect investors and maintain market integrity, can often act as a deterrent to venture capital investment, especially in the startup ecosystem. The need to navigate multiple legal frameworks, from SEBI regulations to FEMA guidelines, creates significant challenges for VCs.

Regulatory Uncertainty

The evolving nature of regulations, particularly those related to foreign investment, adds to the complexity. VCs often face uncertainty regarding the exit strategies for their investments, particularly when dealing with foreign

¹² *Id*

¹³ ClearTax, *Pre And Post Funding Compliance For Startups*, (Jul 13th, 2021) <https://cleartax.in/s/pre-post-funding-compliance-startups>

¹⁴ Supra Note 355.

exits¹⁵. India's regulatory environment has, in some cases, made it difficult for foreign investors to enforce their exit rights, leading to prolonged disputes and legal battles.

Investment Restrictions

The minimum investment threshold set by SEBI for VCFs can also act as a barrier, limiting the pool of potential investors to those with significant capital¹⁶. This restriction can reduce the overall availability of funds in the market, particularly for smaller startups that may struggle to attract large investments.

Multiple Regulatory Bodies and Overlapping Jurisdictions

One of the primary challenges in establishing and operating a venture capital fund in India is the involvement of multiple regulatory bodies, each with its own set of compliance requirements. The Securities and Exchange Board of India (SEBI) plays a central role in regulating venture capital funds through the SEBI (Alternative Investment Funds) Regulations, 2012.¹⁷ These regulations categorize funds into three distinct categories, each subject to different regulatory obligations based on their investment strategies and target sectors. Category I funds, which include social venture funds and infrastructure funds, are designed to have a positive impact on the economy and are granted certain incentives. Category II funds, which include private equity and debt funds, and Category III funds, which encompass hedge funds and other complex investment vehicles, are subjected to more stringent regulations¹⁸. The categorization itself adds a layer of complexity, as venture capitalists must navigate different regulatory landscapes depending on the nature of their fund.

Restrictions on Activities and Investments

SEBI regulations impose strict conditions on the activities of venture capital funds. Under Regulation 8 of the Securities and Exchange Board of India

¹⁵ Vestbee, *The exit challenge: why venture capital struggles with timely returns*, (June 20, 2024) <https://www.vestbee.com/blog/articles/the-exit-challenge-why-venture-capital-struggles-with-timely-returns>

¹⁶ Securities and Exchange Board of India (Venture Capital Funds) Regulations, 1996, Regulation 11, https://www.sebi.gov.in/sebi_data/commdocs/vcfnew_p.pdf

¹⁷ King Stubb & Kasiva, *Introduction of Green Energy Open Access Charges Regulations 2024 by JERC for Manipur and Mizoram*, King Stubb & Kasiva Advocates & Attorneys, (May 31, 2024) <https://ksandk.com/corporate/legal-issues-in-venture-capital-in-india-navigating-a-complex-landscape/introduction>

¹⁸ Nidhi Bothra, Venture Capital Regulations – India, Vinod Kothari & Company, (<https://vinodkothari.com/wp-content/uploads/2014/01/Venture-Capital-Regulations-India.pdf>

(Venture Capital Funds) Regulations, 1996, a venture capital fund is restricted from carrying on any activities other than those related to venture capital funding.¹⁹ This limitation can stifle the flexibility of VC funds in exploring diverse investment opportunities or engaging in other financial activities that could enhance their returns. Additionally, Regulation 10 states that any applicant whose application for registration as a venture capital fund is rejected cannot carry on any venture capital activities, creating a high-stakes environment for fund managers seeking to enter the market.²⁰

Moreover, SEBI mandates a minimum investment threshold of five lakh rupees for investors in venture capital funds.²¹ While this provision is intended to ensure that only serious investors participate in the VC market, it effectively excludes smaller investors who may be willing to contribute but cannot meet the minimum investment requirement. This not only limits the pool of potential investors but also reduces the amount of capital available for startups, particularly in their early stages.

Challenges for Foreign Venture Capitalists

Foreign venture capitalists face additional layers of complexity due to India's stringent foreign exchange regulations. The Foreign Exchange Management Act (FEMA) governs the flow of foreign capital into India, and compliance with Reserve Bank of India (RBI) guidelines on foreign direct investment (FDI) and external commercial borrowings (ECB) is crucial. These regulations are designed to align foreign investments with India's economic priorities, but they can also create significant barriers for foreign investors. For example, foreign venture capitalists must navigate a maze of approvals and reporting requirements, which can delay investments and increase transaction costs.

Furthermore, regulatory restrictions on foreign exits have proven to be a significant hurdle for investors. In many cases, foreign investors have struggled to enforce their exit rights, often due to regulatory constraints that limit their ability to repatriate profits or sell their stakes in Indian companies.²² This uncertainty around exits can deter foreign venture capitalists from investing in Indian startups, as they may be concerned about their ability to realize returns on their investments.

¹⁹ Securities and Exchange Board of India (Venture Capital Funds) Regulations, 1996, Regulation 8, https://www.sebi.gov.in/sebi_data/commondocs/vcfnew_p.pdf

²⁰ Securities and Exchange Board of India (Venture Capital Funds) Regulations, 1996, Regulation 10, https://www.sebi.gov.in/sebi_data/commondocs/vcfnew_p.pdf

²¹ Supra Note 365.

²² Nishith Desai Associates, *Disputes in Private Equity: Assessing the Enforceability of Investor Exit Rights in India*, (Jan 30, 2024) <https://www.nishithdesai.com/NewsDetails/14896>

Impact on The Venture Capital Ecosystem

The complex regulatory landscape in India has both positive and negative impacts on the venture capital ecosystem. While the regulations are designed to protect investors and ensure transparency²³, they also create significant barriers to entry for new funds and can discourage investment in early-stage startups. The operational and compliance burdens placed on VCs can stifle innovation and reduce the overall dynamism of the market.

The cumulative effect of these regulatory challenges is a venture capital ecosystem that is often perceived as overly complex and risk-laden²⁴. The stringent compliance requirements, coupled with the uncertainty around foreign exits and the high costs of legal and regulatory adherence, can demotivate venture capitalists from establishing and investing in Indian startups. As a result, despite India's growing reputation as a global startup hub, the potential for venture capital investment remains constrained by the very regulations designed to govern and protect the market.

Moreover, the challenges associated with foreign investment, particularly the difficulties in enforcing exit rights, can make India a less attractive destination for global venture capital²⁵. As a result, the regulatory environment, while necessary for ensuring market stability, can also inhibit the growth of the startup ecosystem by making it more difficult for VCs to operate effectively.

Foreign Investment and Regulatory Challenges for Venture Capital in India

India's venture capital landscape is heavily influenced by complex foreign investment regulations, particularly Foreign Direct Investment (FDI) and Foreign Venture Capital Investment (FVCI). FDI, governed by FEMA, involves cumbersome compliance requirements, sectoral caps, and overlapping regulations from multiple agencies like SEBI and RBI, creating

²³ SEBI (Foreign Venture Capital Investor) Regulations, 2000, *Frequently Asked Questions (FAQs) - Foreign Venture Capital Investor (FVCI)* https://www.sebi.gov.in/sebi_data/faqfiles/mar-2023/1677648247608.pdf

²⁴ King Stubb & Kasiva, *Legal Issues in Venture Capital in India: Navigating a Complex Landscape*, King Stubb & Kasiva Advocates & Attorneys, (June 6, 2024) <https://ksandk.com/corporate/legal-issues-in-venture-capital-in-india-navigating-a-complex-landscape/:~:text=It%20includes%20provisions%20on%20corporate,accountability%20in%20venture%2Dbased%20companies>.

²⁵ Nishith Desai Associates, *Startups and Venture Capital Investments*, (Sep , 2018) <https://www.nishithdesai.com/Content/document/pdf/ResearchPapers/Startups-and-Venture-Capital-Investments.pdf>

barriers for foreign investors. FVCI regulations further complicate matters, with stringent qualification criteria and a rigid investment structure²⁶. To qualify as an FVCI, entities must meet stringent criteria, including a minimum net worth of USD 5 million and a five-year track record in venture capital or private equity.²⁷ Additionally, FVCIs must invest at least 66.67% of their funds in unlisted equity shares or equity-linked instruments, with the remainder allowed in specified instruments.²⁸ This rigid allocation restricts investment flexibility. The dual compliance burden and need for government approvals in certain sectors deter foreign venture capitalists, making the investment process time-consuming and costly. Simplifying these regulations could boost foreign investment in Indian startups.

Contradictory and Overlapping Regulations

Foreign venture capitalists face hurdles due to contradictory and overlapping regulations. Although FDI is permitted under the automatic route in many sectors, others still require government approval, causing delays and uncertainties. Compliance with both SEBI and RBI guidelines often creates legal ambiguities, further complicating the investment process. For example, SEBI (Alternative Investment Funds) Regulations, 2012 impose specific investment restrictions, while RBI regulations on fund repatriation add an additional compliance burden, discouraging foreign investors.²⁹

Comparative Analysis with Other Countries

The venture capital (VC) landscape is significantly influenced by the regulatory frameworks in which it operates. While India presents a complex and often cumbersome regulatory environment for venture capital, other global startup hubs such as the USA, the European Union (EU), and China have developed more streamlined systems that are conducive to attracting VC investments.

In the U.S., the regulatory framework is designed to minimize the compliance burden on VCs and startups, which fosters a dynamic and

²⁶ Supra Note 19.

²⁷ CA. Sudha G. Bhushan, *Regulatory Framework Foreign Venture capital Investor*, <https://www.icsi.edu/media/portals/72/Sudha%20Gupta%20Regulatory%20Aspects%20-%20ICSI.pdf>

²⁸ Supra Note 365.

²⁹ Securities and Exchange Board of India (Alternative Investment Funds) Regulations, 2012, LAD-NRO/GN/2012-13/04/11262 [Last amended on February 07, 2023] https://www.sebi.gov.in/legal/regulations/feb-2023/securities-and-exchange-board-of-india-alternative-investment-funds-regulations-2012-last-amended-on-february-07-2023-_69231.html

robust investment environment. The JOBS Act and exemptions under the Investment Company Act of 1940 exemplify this approach³⁰. In contrast, the EU's (Alternative Investment Fund Managers Directive) AIFMD governs venture capital funds across the EU, focusing on transparency and investor protection which introduces more stringent regulations but balances them with the benefit of cross-border investment opportunities.³¹

Unlike the U.S. and EU, China imposes stricter regulations on foreign venture capital investments. China's approach is characterized by strong government intervention, which simplifies domestic investment processes but can be challenging for foreign investors. The Negative List system restricts foreign investment in certain sensitive industries, which can limit opportunities for international VCs but protects domestic players and ensures strategic control over key sectors.

Government Support

The availability of government support in the form of funding, tax incentives, and co-investment opportunities is a common theme across these regions. The EU and China, in particular, have used public funds to de-risk venture capital investments, thereby attracting more private capital into the market.³²

Investor Protection

Both the U.S. and the EU place a strong emphasis on investor protection through regulations that ensure transparency and accountability³³. This not only safeguards investors' interests but also builds confidence in the market, encouraging more investment.

Flexibility and Innovation

Regulatory flexibility is a key strength in the U.S., allowing VCs and startups to navigate different pathways depending on their specific needs. The EU's passporting mechanism under the AIFMD provides a similar flexibility, albeit within a more regulated framework. China's approach, while more

³⁰ Holli Heiles Pandol, *Venture capital regulations*, (Dec 15, 2022) <https://carta.com/learn/private-funds/regulations/>

³¹ Adam Hayes, *Alternative Investment Fund Managers Directive (AIFMD)*, Investopedia, (March 03, 2021) <https://www.investopedia.com/terms/a/alternative-investment-fund-managers-directive-aifmd.asp>

³² Pinsent Masons, *How European venture capital funds can facilitate capital raising in the EU*, (Jul 10, 2024) <https://www.pinsentmasons.com/out-law/guides/european-venture-capital-funds-facilitate-capital-raising-eu>

³³ Valeska Pederson Hintz and Ahsan Sayed, *Venture Capital Law: USA*, (Sep 04, 2023) <https://www.lexology.com/indepth/the-venture-capital-law-review/usa>

restrictive, focuses on protecting domestic innovation and aligning VC activity with national strategic goals.

Policy Recommendations

Streamlining Regulatory Frameworks

Policymakers should consider streamlining the regulatory frameworks governing venture capital investments. This could involve simplifying the registration and compliance processes for foreign venture capital investors (FVCIs) and reducing the number of overlapping regulations. Learning from countries like Singapore, which has a streamlined regulatory environment for venture capital, India could adopt similar measures to attract more foreign investment.

Introducing a Regulatory Sandbox

To encourage innovation and investment in startups, the government could introduce a regulatory sandbox for venture capital investments. A sandbox approach allows startups and investors to operate within a controlled environment where certain regulations are relaxed, enabling them to test new business models and investment structures without the fear of regulatory penalties.³⁴ The United Kingdom has successfully implemented such sandboxes in its financial sector, which India could emulate to foster a more innovation-friendly environment.

Enhancing Clarity and Consistency in Regulations

There is a need for greater clarity and consistency in the application of regulations across different jurisdictions in India. Policymakers should work towards harmonizing state and central regulations, reducing the instances of conflicting legal requirements that startups and investors currently face. This could be achieved through the creation of a centralized regulatory body or a unified legal framework that oversees venture capital investments and startup activities.

Incentivizing Domestic Investment

In addition to attracting foreign investment, policies should also focus on incentivizing domestic venture capital. This could include tax incentives for domestic investors, relaxation of investment caps, and support for domestic

³⁴ Krishna Veera Vanamali, *What is a regulatory sandbox?*, Business Standard (Nov 08 2022) https://www.business-standard.com/podcast/economy-policy/what-is-a-regulatory-sandbox-122110800137_1.html

venture capital funds. Countries like Israel have successfully used such incentives to build a robust domestic venture capital ecosystem, which India could consider adapting to its context.

Conclusion

The Indian startup ecosystem stands at a critical juncture, poised to capitalize on its immense potential for innovation, job creation, and economic growth. However, the complex and often restrictive regulatory environment poses significant challenges, particularly for attracting foreign venture capital (VC). This paper has explored the multifaceted regulatory landscape that governs VC investments in India, highlighting the intricate web of laws and regulations that startups and investors must navigate.

The analysis underscores that while foreign direct investment (FDI) and foreign venture capital investment (FVCI) offer significant opportunities, they are also laden with challenges that can deter potential investors. The overlapping and sometimes contradictory regulations create a compliance burden that is difficult for startups to manage without expert legal guidance.

To address these challenges, the paper proposes several strategies, including early-stage regulatory planning, simplification of legal structures, and leveraging technology for compliance. Additionally, the role of legal advisors and in-house compliance teams is emphasized as crucial for navigating the regulatory maze. On a broader scale, policy recommendations such as streamlining regulatory frameworks, introducing regulatory sandboxes, enhancing clarity and consistency in regulations, and incentivizing domestic investment are proposed to create a more supportive environment for VC in startups.

By adopting these strategies and learning from global best practices, India can create a more favorable environment for venture capital investments, thereby unlocking the full potential of its startup ecosystem. The implementation of these recommendations will not only attract more foreign investment but also strengthen the domestic VC landscape, driving innovation and economic growth. The future of Indian startups hinges on the ability to navigate and reform the current regulatory landscape, making it imperative for stakeholders to collaborate in fostering a more conducive investment climate.

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Navigating Intellectual Property Challenges For Early-Stage Startups

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Introduction

“You need to be able to sell your story, but you also need to be able to protect your story.” The statement subtly but cleverly emphasizes the dual importance of marketing and safeguarding one’s ideas. Ideas are precious assets, especially for a startup as they thrive on innovation. However, they can only flourish when you protect them from being stolen or copied, or you will have nothing unique to distinguish you. But how can one ensure that their innovative idea turns into long-term success? The answer is simple, you have to secure your innovative ideas by IPR. But the question is, what is IPR?

Intellectual Property rights or IPR are those rights that protect the intangible creation of the human intellect and give privileges to the creators, much like physical property. IPR includes copyrights, patents, trademarks, trade secrets, and other rights, each serving a unique purpose¹. IP is not only an assurance of your ownership but also gives new businesses the means to extract value from the differentiable ideas, products, and branding they have created. It provides startups with the legal footing they require to safeguard one-of-a-kind notions, discovered things, and brand identities so that they can maintain their competitive edge in an increasingly crowded market. Many obstacles are encountered by new startups as they strive to develop unique ideas and establish themselves in the market. One of the primary challenges that a business faces is about managing its IPR properly. IPR acts as a catalyst for the growth of small companies. IP covers the interests of entrepreneurs at all levels, which puts startups on par with large companies in terms of competition. However, to date, startups pay little attention to

¹ World Trade Organization, https://www.wto.org/english/tratop_e/trips_e/intel1_e.htm, (Last visited on August 1, 2024)

protecting intellectual property for several reasons. Early-stage businesses face multiple obstacles, but with right IP management businesses can advance of their competition with the arrival of new technology.

This article will discuss the multifaced nature of IPR, the Challenges new startups face, and ways to overcome these challenges.

The article contends that implementing a proactive intellectual property (IP) strategy in early-stage startups not only significantly accelerates their growth but also positions them more favourably in the market and despite the challenges involved, the benefits of robust IP management far outweigh the challenges, particularly when compared to startups that neglect such strategies.

Hypothesis

The long-term financial benefits of IP protection for startups, such as increased investor confidence and market exclusivity, outweigh the initial costs and resource constraints associated with securing IP rights.

Why is IP A Game Changer?

In the context of startup activities, IP protection brings Vital differentiation and a crucial competitive edge to any business. To exemplify, Fitbit used provisional patents to protect its original ideas of fitness tracking devices and used this time to perfect its technology². Early startups are in frequent need of funding. Investors are generally risk-averse and the presence of no clear IP protection can be a red flag for investors and scare them off. Clear IP management and strategies show that a startup is committed to protecting its innovation and knows how to make money from it. Thus, they can be expected to manage risks and are more likely to be appealing to potential investors. The money available can then be used to accelerate the startup's growth allowing it to expand its operations, bring in talented people, and offer product diversification.

Patents provide startups exclusive rights to their invention for 20 years and encourage investments in R&D. It provides the startups an opportunity to attract customers and stand out in the market³.

Moreover, trademarks play an essential role in claiming an exclusive right to a brand name, logo, and slogan, protecting these elements of brand

² Fitbit, <https://www.fitbit.com/global/in/technology>, (last visited August 2, 2024)

³ Modak, S., Vijayalakshmi, P., Safiullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

identity⁴. For startups in the development stage, a strong brand is the key to success. The effective protection of trademarks is beneficial for building customer loyalty. Well-known brands are often associated with trust and quality and are preferred by consumers.

Creating a distinct brand identity will not only help to make the business more appealing to potential buyers, but it will serve as a foundation for further marketing activities and moving on to new markets or product lines⁵. In a global market, every startup that aspires to expand its business in other countries must know how to manage IPR as all countries have different rules related to IPR, which is why a strong strategy that will protect the firm's intellectual assets in other countries is required in order not to rock the boat. The worldwide shield will prevent anyone from using the novelties in the startup's brand or abusing their work as their startup moves on to a different market.

What's at Stake If Your Startup Lacks IP Protection?

Some may wonder why a startup in its nascent stage would allocate its limited budget to protect its IP when there are countless other important expenses to cover. While one could answer this question by listing the benefits of IPR or outlining the challenges faced by ignoring IPR but the most compelling explanation can be given by citing a real-life example of "Pillowcase", which was a promising San Francisco startup, created a unique eco-friendly pillowcase with patented sleep technology. The founders although aware that the product featured a unique design and material composition chose not to file for a patent due to the high costs and complexity of the application process. Without patents and trademarks, Pillowcase watched helplessly as competitors flooded the market with copycat products. Their hard-earned market share evaporated, and investor confidence plummeted⁶. It teaches a lesson to all startups to not let their brilliant ideas become someone else's profit. Prioritize IP protection from day one – it's not just an expense, it's an investment in your startup's future.

⁴ Official website of Intellectual Property India, <https://ipindia.gov.in/trade-marks.htm>, (last visited August 3, 2024)

⁵ Saifullah, M., Anchal, & Parveen, N. (2024). Brand Building Through CSR Initiatives During Hajj and Umrah: A Study of Tourism Industry. In *Corporate Social Responsibility, Corporate Governance and Business Ethics in Tourism Management: A Business Strategy for Sustainable Organizational Performance* (pp. 85-92). Emerald Publishing Limited.

⁶ Sheets of San Francisco, <https://sheetsofsanfrancisco.com/product/pillowcase/>, (last visited August 3, 2024)

When IP lacks protection rival firms can copy a startup's products, technology, or brand identity as in the case above. It can saturate the market with lookalike products pushing prices down and shrinking profit margins. In addition, from the very beginning of its existence, a startup without IP protection can suffer from expensive lawsuits. Without trademarks, it becomes impossible to develop a recognizable and trusted brand. Most importantly, the company may fail to attract the right employees. Talented employees want to work in environments that properly protect their ideas and get recognition for them. The lack of IPR guidelines makes it challenging to collaborate with other companies. Moreover, to avoid imitation or subsequent legal action, the startup has to spend more resources on monitoring. Such startups are also not able to build customers' trust and questions are often raised about the brand's authenticity⁷.

Tackling Common IP Challenges Faced By Startups with Smart Strategies

Startups generally operate with limited resources and high-risk environments. They are known for their technology and innovation so logically safeguarding their original concepts and assets should be one of their priorities. IP acts like a shield for the company⁸. However, due to the numerous challenges they have to face, they tend to ignore it and postpone it assuming a legal team can handle it later. But they need to understand the critical importance of protecting their (IP). they must consider IP as a strategic asset and not a mere legal formality. From providing economic benefits to attracting investors, it influences businesses.

Here are some of the challenges that startups face and how IP Strategies can help navigate the same.

Budget Constraints

Budget constraints is the major issue for early startups. It is easy to say, hire an IP lawyer, acquire patents, trademarks, etc. But these actions are very complicated to do in reality. These small enterprises often operate on limited funds, making it difficult to protect their ideas. Hiring a lawyer can be very expensive especially for early startups. Moreover, the cost of filing intellectual property, particularly patents, is prohibitively high for new startups. As a result, they often forego obtaining patents due to the exorbitant expenses

⁷ Cognition IP, <https://www.cognitionip.com/ip-and-investors-what-startups-need-to-know/>, (last visited August 2, 2024)

⁸ Reuters, <https://www.reuters.com/legal/legalindustry/startups-ip-protections-fuel-growth-protect-your-future-2023-03-20/>, (last visited August 4, 2024)

involved, especially since they are already burdened with numerous other costs.

Even if they manage to protect their ideas, the cost of litigation in case of infringement, whether by themselves or others, can be expensive.

But it's rightly said, "The cost of protecting your intellectual property is far less than the cost of losing it." This is because once your idea is stolen, it is lost forever. For a startup, its core value lies in its unique idea, which serves as its primary selling point. Without IP protection, the startup risks losing not just its idea but potentially its entire business. On the other hand, securing IP protection provides a safeguard, offering the chance to defend and retain its invention, ensuring the business's longevity and competitiveness. Therefore, although initial investment seems to be high, but that will only ensure long run of business. There are so many examples of successful enterprises that benefitted from it. for example, Uber, a ride sharing company filed patent for "Uberride Matching System," which has now become its selling point. They are even granting license to other companies for the same.⁹ Similarly many companies are now benefitting from such decisions they took at the outset.

Since a startup's primary challenge is budget crunch they have to use the limited budget effectively. This is where IP strategy comes into play. With the perfect strategy, the minimum budget can be used effectively to build a strong system to navigate most of the IP challenges and protect it. Developing a diligent and intelligent IP strategy in a nascent stage is crucial and easier.

The first step to do is to prioritize IP assets based on their strategic importance. Figure out which IP is most relevant to a particular business and then focus on the key innovations that give the company an edge over others. This involves identifying and securing IP rights for core innovations, products, branding elements, and more.

After that engaging a qualified IP professional is suggested since startups generally have no expertise on the matter. Although startups operate on a limited budget, this is an essential requirement as this lies at the core of ip strategy. Poorly drafted documents and claims can jeopardize the realization of IP assets.¹⁰ Given that IP legislation and its interpretation are constantly changing, a skilled IP professional can provide valuable support to startups in this area. These experts also assist in managing legal intricacies, minimizing risks, and ensuring regulatory compliance. IP lawsuits are inevitable, whether

⁹ FasterCapital,<https://fastercapital.com/keyword/patent-application.html> (Last visited December 29, 2024)

¹⁰ World Intellectual Property Organisation, <https://www.wipo.int/sme/en/top-10-intellectual-property-mistakes-smes-entrepreneurs.html>, (last visited August 6, 2024)

a business infringes or is infringed upon. An IP expert is crucial to draft contracts, file patents, and prevent unnecessary litigation. Proactively hiring legal help is smarter than dealing with costly lawsuits later.

But keeping in mind their scarce resources, it becomes essential to understand when professional guidance is necessary since they might lack funds for in-house IP Attorneys. They may not hire a full time IP lawyer. But what they can do is consult an IP specialist before making significant IP-related decisions. Also, startups should teach and coach their staff on how to handle the company's intellectual property, set up clear in-house rules to manage confidential information and create policies to protect IPR when workers leave the company.

They can also make use of NDA or non-disclosure agreements (NDAs) which play a crucial role in safeguarding confidential information when dealing with outside parties, like investors. These NDAs offer legal protection against unauthorized sharing of such information. Similarly, contracts can be used to define ownership of IP created during the development process¹¹.

IP Complexities

Often startups have the notion that IP costs too much and the process of acquiring is time consuming and complicated. So they tend to skip the process. Getting a trademark takes about a year, while patents involve more complex and time-consuming processes. The trademark office assigns an examining attorney within six months after you file, and you'll see major updates around the seven-month mark. These long waits discourage many new companies from taking steps to protect their ideas and brands. Only the government can reduce these complexities. But one thing that the startups can do is One strategy for startups is to file a provisional patent application. This type of application serves as a placeholder—it isn't examined but establishes an early priority date for the disclosed material. Within 12 months, the startup can file a non-provisional application claiming the provisional priority date, provided the provisional supports the non-provisional claims. This approach demonstrates to investors that the company is actively working on IP protection and thereby gaining investor confidence while saving and deferring costs. A "patent pending" status from a PPA can strengthen the startup's IP portfolio, increasing its appeal to investors by showcasing innovation protection and winning their confidence. A PPA requires minimal formalities, such as no detailed claims or prior art analysis, making

¹¹ The Times of India, <https://timesofindia.indiatimes.com/readersblog/finance-musings/10-legal-mistakes-made-by-startups-50381/> (last visited August 5, 2024)

it quicker and easier to file. Provisional applications are less expensive to file and prepare compared to non-provisional ones.¹²

Lack of Awareness

Lack of awareness in this area is another challenge that new entrepreneurs need to navigate. Early startups are often unaware of the advantages of securing their intellectual property rights (IPR). They don't see why it matters. Their primary aim is to keep their business going and growing. For Example, in Africa, More, than half of small and medium-sized businesses (SMEs) have never even heard of IPR. The lack of awareness leads startups to neglect to register patents, trademarks, copyrights, or other IPRs. The ultimate result is they miss great opportunities to earn profit and shield themselves from potent risks, becoming vulnerable to having their ideas stolen and missing out on valuable intellectual assets.¹³ Moreover, due to their lack of awareness or disregard for securing intellectual property, they remain uninformed about the laws and initiatives available to support them. Even the government is eager to help. For example. India's government provides options like Discounted Filing Fees (80% off for startups) and the Startups Intellectual Property Protection (SIPP) plan¹⁴. The startup should know about these programs and use them. Also, using IP funds available in many countries can help handle IP protection costs. For instance, the EU SME Fund, helps EU SMEs safeguard their intellectual property as they recover from COVID-19 and go through digital changes offering up to 60% in savings. China, the United States, South Africa, and Malaysia have similar policies in place.¹⁵

There is no way but to be aware of one's surroundings. Careful patent and trademark searches help businesses steer clear of stepping on existing IP toes and dodge needless expenses. Keeping tabs on industry shifts and what rivals are up to with their IP filings matters too. Startups must prioritize patent filings based on business goals. Google strategically patents technologies related to its core search engine.

¹² Fastercapital, <https://fastercapital.com/topics/steps-to-filing-a-provisional-patent-application.html> (last visited August 7, 2024)

¹³ ABOU NAJA Intellectual Property, <https://abounaja.com/blogs/intellectual-property-challenges> (last visited August 6, 2024)

¹⁴ Startup Republic, <https://srepublic.in/Scheme-for-Facilitating-Start-Ups-Intellectual-Property-Protection> (last visited August 5, 2024)

¹⁵ International Trademark Association, <https://www.inta.org/perspectives/from-our-committees/ip-funding-programs-for-smes/> (last visited August 6, 2024)

New companies should keep an eye on IP law changes in their field and area to make the most of these rules. Doing IP check-ups can help spot and size up all possible IP assets, fill in protection gaps, and come up with plans to keep them safe. The first crucial step is to raise awareness among aspiring entrepreneurs about the importance of IP. This can be achieved through seminars and workshops designed to educate them. Additionally, incubator centres should place a strong emphasis on promoting IP awareness and its strategic significance. This way, new entrepreneurs entering the market will already understand the importance of IP and how to leverage it for success.

Limited Means

Sometimes, startups lack the resources or expertise to leverage their IP to reap its fullest benefits. To navigate such challenges, startups can consider licensing IP from other firms or collaborating with enterprises. The general notion is that IP just costs money, but if you are smart enough, you can earn money from it, too! Startups can license their IP and earn money from it.¹⁶ For example, Amazon.com which is one of the largest and online company has developed a number of successful products including the Kindle e-reader, the Kindle Fire tablet, and the Amazon Echo smart speaker. In 2007, it patented its “One Clic Shopping” Feature which has now become one of its selling points. Amazon licensed the technology, and it is now widely used by other companies, generating significant revenue for the company.¹⁷ Similarly, In 2016, Intel licensed its 3D XPoint memory technology to Micron Technology. This allowed Micron to incorporate the technology into its own products, while Intel received a royalty on the sales.¹⁸

Collaboration or IP sharing is also one of the techniques that startups can use which offer significant advantages for them. For instance, innovators, startups or smaller organisations often lack resources to fully develop or commercialize their IP. Collaboration can mitigate risks, and open opportunities to enter new markets or industries. In partnerships, startups benefit from shared resources, expertise, and reduced costs, such as expenses related to research and patenting. However, concerns like IP leakage or loss of control can arise. These risks can be mitigated through well-drafted contracts

¹⁶ World Intellectual Property Organization, https://www.wipo.int/patents/en/faq_patents.html#:~:text=The%20patent%20owner%20may%20give,new%20owner%20of%20the%20patent (Last visited December 29, 2024)

¹⁷ FasterCapital, <https://fastercapital.com/keyword/patent-application.html> (Last Visited December 29, 2024)

¹⁸ FasterCapital, <https://fastercapital.com/topics/case-studies-of-successful-use-of-intellectual-property-rights-for-startups.html> (Last Visited December 29, 2024)

and non-disclosure agreements (NDAs) that clearly define ownership and usage rights.

Overall, collaboration, when managed with appropriate safeguards, presents a viable strategy for startups to maximize the value of their IP, reduce costs, and foster innovation.

Intellectual property is a vital organ for a company and complexities often arise in the process of sharing it. Although there are instances where for the mutual benefit of both companies the IP has been shared such as

Joint ventures- This is referred to as one of the best ways to share IP by the companies. In a joint venture, two or more companies work together on a specific project, pooling their resources and expertise to ensure its success. They also share both the risks and rewards associated with the project. One of the best examples of a joint venture was Ford and Microsoft in the year 2015. The joint venture allowed Ford to integrate Microsoft's technology in their motor vehicles while Microsoft got all the access of customers database of the Ford.¹⁹

Similarly, there are numerous other strategies that a startup can adopt that best suit them according to their needs.

Conclusion and Suggestions

To sum up, new startups should pay proper attention to intellectual property rights as the key factor to help them survive in a world of tough competition. This old saying fits the ideas mentioned in the paper: "An ounce of prevention is worth a pound of cure"²⁰. If startups understand the prominence of IPR, make it their priority, and take serious steps for its implementation they will see a lot of its problems vanishing. They can get new opportunities for funding and further development. Having a kind of preventive strategy for startups guarantees the safety of their unique ideas from competitors who can steal them. The same idea helps to win the interest of investors who prefer companies that have certain backgrounds in dealing with IP.

Indeed, there are issues, including financial pressure, ignorance, and legal intricacies, but these are not impossible to deal with. After all, startups can address the concerns by developing a robust IP strategy which includes involving lawful experts, using government support and many more. In the long run, a solid IPR plan is a way to improve the company's destiny and succeed in an ever-changing realm filled with competition. In other words,

¹⁹ Id.

²⁰ Cambridge Dictionary, https://dictionary.cambridge.org/dictionary/english/ounce-of-prevention-is-worth-a-pound-of-cure#google_vignette, (last visited August 7, 2024)

putting money and time investments in building IPR is not dictated by the law — instead, these are critical strategies that either create a path to success or shatter it.

From our point of view, IPR is an essential element in ensuring the successful flourishing of businesses. Since new startups are more dependent on new ideas, we believe that dismissing IPR completely would cause major problems. Moreover, given that we live in an era of platforms such as Shark Tank, where participants openly pitch their business ideas, the risk of ideas being stolen increases. On one hand, such platforms provide a stage for young startups to market and advertise their products, on the other hand, chances of idea theft increase notably which depicts the importance of having IPR safeguards.

We do think that attending shows like Shark Tank is a good way for early startups to get exposure. However, we also feel that IPR plans should be in place as well. We know that there are problems with acquiring IPR. Despite that, we feel that this should not prevent Startups from taking the proper approach. The article suggests effective ways to handle intellectual property such as focusing on critical IP assets through proper use of government machinery, doing a proper search, and hiring professionals to deal with it. We conclude by saying that with good planning these ideas can be put into action and early startups will be able to navigate the complex and obscure world of dealing with IP issues. Such practice would increase the safety of newly born ideas and ensure the business is developing and growing safely and soundly.

Balancing Growth and Regulation: Protecting Emerging Start-Ups in India's Draft Digital Competition Bill

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Abstract: The digital market landscape is becoming increasingly anti-competitive, with a few companies dominating the market share and posing barriers to entry for new competitors. In response, the Indian government introduced the draft Digital Competition Bill in 2024. However, the Bill is surrounded by debate, with questions about its suitability for start-ups. According to industry experts, the Bill encompasses emerging start-ups within its scope, imposing additional conduct requirements that may diminish their ability to grow.

Leading the debate further, this article provides an in-depth analysis of the draft Digital Competition Bill, reports from various governmental committees, international aspects, and the concerns raised by industry experts. The author critically examines the nature of the digital market and the impact of the Bill, focusing on provisions related to thresholds for qualifying as a dominant player, Associate Digital Enterprises, and data portability. The author highlights potential harm to emerging Indian start-ups and emphasizes the need for differential treatment of emerging start-ups compared to established dominant players. To address these concerns, the author recommends a two-tier threshold mechanism along with a mixture of ex-ante and ex-post regulations for emerging players, and a few changes in the proposed framework.

The article provides a middle ground, effective in maintaining a competitive market while avoiding harm to growing start-ups.

Keywords: *Anti-competitive, Digital Competition Bill, Emerging Start-Ups, Dominant Player, Data Portability.*

Introduction

Start-up is another name for innovation. Start-ups are the nucleus of novel innovations, they generate employment, make the economy stronger, and foster the overall growth of the country. However, they are considered as newly born companies that struggle for existence.¹ The Indian government has recognised the importance and potential of start-ups and their implications. Consequently, to promote start-up culture, among other initiatives, the government launched the “Start-up India” initiative in 2016. Start-up Companies recognised under this scheme can avail of many benefits such as self-certification, tax exemption, Fastrack IPR applications, easy winding up, and public procurement.² According to a 2023 report, Start-up India has recognised over 1 lakh start-ups with IT services sector being the top performer with more than 13,500 start-ups at a compounded annual growth rate of 289 per cent since 2016.³

To assist the growth of start-ups and for a healthy market, fair competition is necessary. To maintain a fair and competitive market, Competition Act, 2002 is in place. Further, with the growing digital age and rapid development of the IT sector and its involvement in almost all aspects of human life, the legislature has also introduced the Draft Digital Competition Bill, 2024 (“Bill”).⁴ The Bill is aimed at regulating a few practices by big tech companies that can potentially harm a healthy competitive market and also pose entry barriers to new entrants in the market. The Bill names such companies as Systemically Significant Digital Enterprise (“SSDE”).⁵

According to industry experts, the Bill contains a provision that could do more harm than good to homegrown start-ups. The Bill outlines certain financial and user base thresholds to tag a company as SSDE. As per the experts, these thresholds will include many growing start-ups under its ambit and consequently adding more compliance requirements

¹ Modak, S., Vijayalakshmi, P., Saifullah, M., & Shetty, A. (2024). A Study on Talent Management Start-Ups Through Bibliometric Analysis. In *Technopreneurship in Small Businesses for Sustainability* (pp. 1-20). IGI Global.

² Press Information Bureau, Government of India, Start-Up India Launch by Prime Minister Narendra Modi, 1 (2016), <https://pib.gov.in/newsite/printrelease.aspx?relid=134186>.

³ Ministry of Commerce and Industry, Powering a Resilient & Agile Bharat for the Advancement of Visionary Startups, 6 (2016-23), <https://www.startupindia.gov.in/content/dam/invest-india/Factbook-100K-Recognitions.pdf>.

⁴ Draft Digital Competition Bill, 2024, (India).

⁵ *Id.*, Cl. 3.

to these indigenous start-ups could burden them and, in turn, hinder innovation.⁶

The Bill is made after a keen analysis of laws of various other jurisdictions including European Union, the United States and the United Kingdom. These states have also included similar provisions in their law. Considering the unique economy of India and a newly emerging start-up culture, it is important to analyze whether adopting such similar provisions in Indian law is suitable or not.

The author in this paper has analyzed growing start-up culture along with the Competition law jurisprudence of India to examine the impact of the upcoming Draft Digital Competition Bill on indigenous start-ups and their opportunity to compete with global players in the global market. The paper focuses on start-ups in digital market and the potential implication of additional compliances posed on them and suggested few measures that could be adopted to maintain a healthy, competitive market and to help start-ups to effectively compete at global level.

Implications of The Bill for Indian Start-UPS and the Digital Market

Currently, digital market is significantly controlled by few huge global companies, for instance, Google (Alphabet Inc.), Meta, Amazon.com, Inc. and others. New and growing digital start-ups are also trying to make their place in this market. However, the upcoming Draft Digital Competition Bill is contented to diminish their ability to compete at the global level. If this apprehension turns to be true, it will dissolve the ability of Indian start-ups to become a leading global player and deter the potential benefit to the economy of India.

The Bill

To understand the gravity of this debate, let us understand what the Bill offers and how it could impact the market player. Under the Bill, a market player will be classified as a Systemically Significant Digital Enterprise if it meets any of the following criteria: a turnover of at least INR 4000 crore in India or a global turnover of at least USD 30 billion; a gross merchandise value in India of at least INR 16000 crore or a global market capitalization of at least USD 75 billion or its equivalent fair value; and user base thresholds

⁶ Dhanendra Kumar, *Impact of Digital Competition Bill on India's homegrown startup ecosystem*, BUSINESS STANDARD (Jul 01 2024) https://www.business-standard.com/companies/start-ups/impact-of-digital-competition-bill-on-india-s-homegrown-startup-ecosystem-124070101008_1.html.

of one crore users or ten thousand business users over the past three financial years. Such enterprises will be required to comply with specific conduct requirements, regardless of whether their actions threaten market competition.⁷ Conduct requirements includes prohibition of practices such as favouring own products, services, or lines of business (self-preferencing); using data accumulated through the commercial activities of business users or their end users (data usage); restricting third-party applications on core digital services; preventing their business users from moving out of the platform (anti-steering provisions); restricting or incentivising users to use one or more of their product or services (tying and bundling). Along with these prohibitions, the Bill also mandates all other entities (Associate Digital Enterprises) linked / connected with SSDE to adhere to these conduct requirements.⁸ The law will be applicable to all platforms offering Core Digital Services, which encompass online search engines, social networking services, video-sharing platforms, messaging services, operating systems, web browsers, cloud services, advertising services, and online intermediary services.⁹ This huge ambit leaves only direct online retail services, such as those offered by traditional brick-and-mortar companies with their own websites, connecting individually with users.

Threat to Emerging Start-UPS

The most contended issue in the Bill is the threat to start-ups.¹⁰ The major problem is with the thresholds; it is very low in light of the number of internet users in India. India has more than 820 million active internet users at present.¹¹ The minimum threshold of 1 crore users will cover several small players in the market and impose ex-ante obligations over them. Mathematically, 1 crore is just 1.22% of total internet users in India. On the other hand, there are huge players in the market with whom new entrants will have to compete. Such big players have enormous financial power and user base. For instance, Airbnb (AirBedandBreakfast.com) has a global turnover of 9.92 billion U.S. dollars

⁷ Draft Digital Competition Bill, 2024, Cl. 3, (India).

⁸ *Id.*, Cl. 7.

⁹ *Id.*, Sch. I.

¹⁰ Joseph V. Coniglio and Lilla Nóra Kiss, *Comments to the Indian Ministry of Corporate Affairs Regarding Digital Competition Law*, INFORMATION TECHNOLOGY AND INNOVATION FOUNDATION (May 15, 2024) <https://www2.itif.org/2024-india-digital-competition-bill.pdf>.

¹¹ Annapurna Roy, *How India is using the Internet*, THE ECONOMICS TIMES TECH (Mar 10, 2024) <https://economictimes.indiatimes.com/tech/technology/how-india-is-using-the-internet/articleshow/108354854.cms?from=mdr>.

in 2023¹² which is approx. INR 83,049.248 crore, whereas an Indian start-up in the same market, Oyo (Oravel Stays) stands at a global turnover of INR 5,464 crore in 2023.¹³ Moreover, almost every internet user uses the Google search engine, and as of 2022 Google-owned Android currently dominates the Indian market with a 95.1 percent market share.¹⁴ The major reason behind such a huge market presence of present big players is the practices they have employed for years in their business, for instance, smartphones having Android OS systems have to pre-install Google-owned apps and the end users are not allowed to uninstall such apps (anti-steering).¹⁵ Now, as per the Bill, these practices will be banned for each player who touches the said thresholds. All the growing start-ups and the gigantic players will be in the same bracket, subject to similar obligations. In such a situation, the concern of industry experts is right. Such obligations can be potential impediments to the growth of new entrants thereby they are grossly unjustified. This way new players will never be able to grow. Even if their practices do not pose any anti-competitive effect, they will have to withdraw from these practices, which could have provided them an opportunity to grow.

Data Portability - Way Out Offered By the Bill

To ensure fair competition in the digital market, the Bill introduces a provision for data portability, mandating that enterprises allow users to transfer their data to other market players.¹⁶ These large companies have utilized user data to offer curated services that enhance consumer experience, contributing to the exponential growth of the digital market. This growth is largely attributable to the strategic use of data.¹⁷ The data portability feature will enable all players to access substantial amounts of data, thereby enhancing their services and

¹² Statista Research Department, *Revenue of Airbnb worldwide from 2017 to 2023*, STATISTA (May 22, 2024) <https://www.statista.com/statistics/1193134/airbnb-revenue-worldwide/#:~:text=The%20total%20revenue%20of%20Airbnb,billion%20U.S.%20dollars%20in%202023>

¹³ Kunal Manchanda & Harsh Upadhyay, *Oyo posts Rs 5,464 Cr income in FY23, losses shrink 34%*, ENTRACKR (Oct. 27, 2023) <https://entrackr.com/2023/10/oyo-posts-rs-5464-cr-income-in-fy23-losses-shrink-34/>.

¹⁴ Indo-Asian News Service, *Android and iOS own 95.1 % and 3.93% market share: Report*, ECONOMIC TIMES BRAND EQUITY (May 19, 2022) <https://brandequity.economictimes.indiatimes.com/news/research/android-and-ios-own-95-1-and-3-93-market-share-report/91657405> .

¹⁵ Ministry of Corporate Affairs, Gov't of Ind., Anti-Competitive Practices By Big Tech Companies, 15 (2022-23), https://loksabhadocs.nic.in/lsscommittee/Finance/17_Finance_53.pdf. [hereinafter ANTI-COMPETITIVE PRACTICES BY BIG TECH COMPANIES].

¹⁶ Draft Digital Competition Bill, 2024, Cl. 12, (India).

¹⁷ ANTI-COMPETITIVE PRACTICES BY BIG TECH COMPANIES, *supra* note 422.

significantly diminishing the data advantage currently held by major players. This provision aims to balance the digital market by redistributing market concentration from a few large enterprises to other participants. While this measure is undoubtedly beneficial for smaller players, allowing them to leverage data that was previously inaccessible, it is important to note that its success hinges on the platform offering services of comparable quality to those of the current major players. Only then will users be willing to port their data. To achieve this, a player must reach a significant financial and technological level, enabling them to effectively compete with global players. However, the question remains: is this provision alone sufficient to foster healthy competition in the market and support the growth of new entrants?

Complex Nature of Digital Market

While the threat to the growth of start-ups is a question, the nature of the digital market further complicates the issue. The nature of the digital market is termed as winner-takes-all market. A phenomenon named the Network effect plays a crucial role in the digital market, it explains how a digital platform continues to grow.¹⁸ As the number of users increases on the platform, the efficiency and importance of the platform will increase, and it attracts more users because of the huge user concentration. A good example to understand it could be messaging apps, where new users will desire to opt for the platform which is already full of a significant number of users. Additionally, the digital market has increasing returns to scale, when a platform becomes fully functional, it can cater to any number of people without a proportional increase in its cost. No additional significant infrastructure is required to cater to additional users.¹⁹ The combined effect of these phenomena results in a market where only a few players can acquire the whole market. A winner-takes-all market refers to an economic system where competition allows the top performers to achieve dominance, often leading to the decline of less successful competitors. This generally results in an oligopoly, where a small number of large, influential companies control the majority of the market share.²⁰

¹⁸ *Id.*, at 2.

¹⁹ *Id.*

²⁰ Vinod Jain, *Understanding the Dynamics of Winner-Take-All Markets*, Forbes Business Council (Mar 5, 2024) <https://www.forbes.com/sites/forbesbusinesscouncil/2024/03/05/understanding-the-dynamics-of-winner-take-all-markets/#:~:text=Winner%2Dtake%2Dall%20markets%2C,of%20both%20opportunities%20and%20risks>.

Moreover, the digital market is often a multi-sided market, where a single market player offers a variety of services. A few famous examples of it are Facebook (which is a social-media platform, a marketplace, a messaging service, and a video-sharing platform) and Amazon (which offers a marketplace, payment service, and OTT streaming service). In such cases, multisided platforms work inter-connectedly, where one side is making a profit another side may be provided to consumers for free to acquire consumer bases,²¹ leaving other competitors at a disadvantage. Additionally, a platform provides distinct yet interconnected services to users, and defining the relevant market for a digital platform is very complex and difficult, it consumes a lot of time²², allowing the platform to employ practices harming other market players.

In these scenarios, when growing enterprises reach the above-mentioned thresholds, they can become a threat to other new entrants by engaging in predatory conduct, exclude competitors from market and create barriers to entry for start-ups. Therefore, an ex-ante approach is indeed required. However, considering the developing Indian economy, a balanced approach is necessary to establish a middle ground. Such an approach should ensure that the competitive capabilities of home-grown start-ups on a global scale are not hindered, while also preventing these enterprises from becoming anti-competitive forces within the market.

Suggestions & Futuristic Approach

In the Bill, the thresholds eventually cover the emerging start-ups that are proportionally very small from the established players in the market. Additionally, the user threshold is only 1.22 percent (1 crore users) of total internet users in India. Therefore, the Bill poses a potential threat to the growth of emerging new entrants by treating them and enormous players with the same yardstick. Given the winner-takes-all nature of the digital market, to avoid stifling start-ups and to maintain a healthy competitive environment, certain adjustments are necessary. A complete ex-ante approach might prove counterproductive, potentially harming new players in the long run.

However, the Bill offers companies the chance to demonstrate why they should not be classified as SSDE.²³ In that process and otherwise, the

²¹ Juan Manuel Sanchez-Cartas and Gonzalo Leon, *Multi-sided Platforms and Markets: A Literature Review*, 35 JOURNAL OF ECONOMIC SURVEYS 4 (2021).

²² Sebastian Wismer & Arno Rasek, *Market definition in multi-sided markets*, ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (Nov. 15 2017) [https://one.oecd.org/document/DAF/COMP/WD\(2017\)33/FINAL/en/pdf](https://one.oecd.org/document/DAF/COMP/WD(2017)33/FINAL/en/pdf).

²³ Draft Digital Competition Bill, 2024, Cl. 4(4), (India).

law needs a more considerate approach towards new start-ups, recognising that they face competition from global players who are exponentially larger. The present Bill is significantly inspired by the laws of developed economies such as the United States of America²⁴, the United Kingdom²⁵, Japan,²⁶ and the European Union²⁷. It is important to note that domestic players in these countries already have a significant global presence, unlike in India, where efforts are ongoing to secure a foothold in the global digital market. Mimicking the approaches of developed nations could harm domestic innovation and initiatives like Digital India and Start-up India. This would likely increase compliance demands, hindering the growth of emerging companies. Additionally, it would place significant regulatory burdens on the government and create considerable uncertainty for businesses.²⁸ Therefore, India needs legislation tailored to its unique economic landscape.

A two-tier system with separate thresholds must be established. The first, lower threshold should apply to growing players, while the second, higher threshold should target extremely large players. The lower threshold should define the point at which regulatory supervision begins. For players crossing this threshold, including new entrants and emerging start-ups, authorities should adopt a combination of ex-ante and ex-post regulations.

Regulators should closely monitor all practices of emerging start-ups, prohibiting only those practices in advance that are unequivocally detrimental to competition and users, based on an analysis of their relative position and that of existing competitors in the relevant market. Other practices should only be prohibited ex-post, after evidence of anti-competitive effects has been established. A blanket ban on all practices that could help start-ups grow and become global players would undermine the objectives of initiatives like Start-up India and Digital India.

For players crossing the second, higher threshold, which includes extremely large entities, their conduct should be prohibited pre-emptively.

²⁴ Ministry of Corporate Affairs, Report of the Committee on Digital Competition Law, 75-80. (2024), <https://www.mca.gov.in/bin/dms/getdocument?mds=gzGtvSkE3zIVhAuBe2pbow%253D%253D&type=open> [hereinafter REPORT OF THE COMMITTEE ON DIGITAL COMPETITION LAW].

²⁵ *Id.*, at 65-72.

²⁶ *Id.*, at 83.

²⁷ *Id.*, at 57-65.

²⁸ Geoffrey A Manne, *European Union's Digital Markets Act not suitable for developing economies, including India*, TIMES OF INDIA (Feb. 14, 2023) <https://economictimes.indiatimes.com/tech/technology/digital-competition-law-large-internet-firms-not-in-favour-of-ex-ante-regulations/articleshow/108466886.cms?from=mdr>.

Due to the nature of the digital market, the actions of these large players can produce unintended anti-competitive outcomes. An ex-ante framework is more efficient for regulating such entities.

The current framework outlined in the Bill presents significant issues. Alongside the proposed two-tier system, a few specific steps could be adopted by authorities to address these concerns. Firstly, authorities should refrain from banning the practice of incentivising users to adopt one or more products or services (tying and bundling) from emerging start-ups. Such practices not only benefit start-ups but also provide benefits to users. Moreover, given the multisided nature of the digital market, these linked or connected entities (Associate Digital Enterprises) might operate in different relevant markets. Therefore, authorities must exercise caution when imposing additional obligations on associate digital enterprises²⁹ linked to the flagged new entrant. It is also important to recognise that these linked or connected entities are not always dominant players in their respective markets, nor have they necessarily achieved the specified thresholds. Imposing the same stringent requirements on them as on globally dominant players could hinder their growth and innovation.

Conclusion

In this era of flourishing digital technology, every sector is increasingly turning digital. Markets that lack digital integration find themselves at a significant disadvantage. This rapid digital growth offers ample opportunities for a developing economy like India, a fact recognized through initiatives such as Start-up India and Digital India. However, alongside this growth, the regulation of the digital market is essential to mitigate its negative effects. The proposed draft Digital Competition Bill introduces several measures to address competition in the digital market. The Bill draws heavily from the laws of developed nations, which poses potential threats to India's start-up culture and growing companies.

There is a pressing need to tailor the proposed framework to the unique context of India. Simply adopting the frameworks of other nations is not viable. Even the provision of Data Portability is not efficient in dealing with the inequality in the digital market, there is a pressing need for a differential treatment for new, emerging, non-dominant players. It would be hugely unjust for new players if they were treated the same as enormous players. If the present proposed framework continues, it will be impossible for an Indian start-up to even dream of becoming as big as the present big companies like,

²⁹ *Supra* note 416.

Meta, Alphabet, Microsoft, and Amazon. It is highly disproportionate that a company with a market share of less than two percent is subjected to the same regulatory framework as a company with a market share exceeding 90 percent. Such an approach will seize the opportunity from India to become a global leader in the digital market, and discourage start-ups because of several additional compliances.

However, the winner-take-all nature and multi-faceted structure of the market indeed demand an ex-ante approach, but it must not be such that it deprives the ability to grow. The two-tier mechanism, a mixture of ex-ante and ex-post regulations along with a few changes proposed by the author aims to create a balanced approach where start-ups can thrive and compete globally without compromising market stability and competition in the digital sector.

REGULATION DISRUPTION

Policy, Law, and Start-up Growth Challenges in India

This edited volume critically examines the evolving regulatory landscape impacting India's start-up ecosystem. Curated from scholarly contributions presented at the 'Start-up and Law Summit 2024', organized by Chanakya National Law University (CNLU), Patna, the book brings together diverse perspectives from academics, legal experts, industry practitioners, and emerging researchers. It offers a comprehensive analysis of the intersection between regulation, policy, and entrepreneurship.

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By critically evaluating India's regulatory framework for start-ups, this volume seeks to foster informed dialogue, advocate legal reform, and empower stakeholders to navigate regulatory disruptions with confidence.

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