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**Contemporary Culture and IP:**  
Establishing the Conceptual Framework

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Designed by: Vivan Kamath

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<b>Overview</b>	01
<b>1. Introduction</b>	01
i. Context and Relevance	01
ii. Understanding what Contemporary Culture means for India	03
<b>2. Details about the Series: Methodology and Monographs</b>	05
i. Methodology	05
ii. Format of the Monographs	05
<b>3. Identifying Relevant Stakeholders, their Incentives, and a Common Value System</b>	06
i. Identifying the key stakeholders - Users, Businesses, and the Government	06
ii. Understanding Incentives	07
iii. Understanding Values	08
<b>4. Frameworks Relevant to the Series: Legal and Economic Frameworks</b>	09
i. Legal Frameworks	09
ii. The Economic Value of Digital Culture: An Understanding of the Economic Framework	12
iii. The Social Value of Digital Culture: An Understanding of the Socio-Cultural Framework	13
<b>5. Megatrends that will Shape Digital Culture and IP in India</b>	14
i. Changing Patterns of Consumption	15
ii. Specialisation and Scale	19
iii. The Evolution of IP Frameworks	22
iv. Privacy and IP – an Evolving Debate	24
v. Future of Work in the Context of Augmented Intelligence	27
vi. Changes in Regulatory Architecture	29
<b>6. Conclusion - The Path Ahead</b>	32

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## Overview

‘Contemporary Culture and IP’ is envisioned as the all-encompassing theme for a series of explorative and provocative monographs on a wide range of topics. The monographs will be rooted in questions of value, innovation, and technology, all of which are considered hallmarks of contemporary digital culture in this series. The monographs will clarify the intersections between intellectual property (IP) laws and digital technologies, emphasising new approaches to managing digital cultural rights, which challenge traditional notions around culture and IP. This foundational report aims to build conceptual understandings of what is meant by digital culture, who the key stakeholders are, and what incentives drive them. Further, it outlines visible economic and legal trends that will inform future monographs.

## 1. Introduction

### i. Context and Relevance

Successful digital transformation has been explained as “a caterpillar turning into a butterfly. It’s still the same organism, but it now has superpowers.”<sup>1</sup> This is perhaps the most apt way to contextualise the ongoing digital transformations in the formal and natural sciences, social sciences, art, and culture, enabled by new technologies.

Across the world, technological innovations are constantly creating new knowledge, improving access to information, and helping cultures evolve, with digital traces marking every human interaction in the digital space. Coupled with this is the fact that in the last five years, more than one billion people have become new Internet users, and digital connectivity has gone from being confined to economically prosperous parts of the globe, to reaching a majority of the world’s population.<sup>2</sup>

In India, the digital transformation in the past few decades has upended the cultural space in a dramatic manner, engendering the need for new legal, economic, and technological responses. This churn has resulted in businesses investing in cultures of collaboration, in capturing volumes of data and enabling collaborative data sharing. It has also added to a more vibrant and mature ecosystem of customers and partners, and made agility and innovation the key goals of a new ‘digital culture’. In fact, new research suggests

that by the year 2021, digital transformation will contribute an estimated US\$154 billion to India’s GDP, and increase the growth rate by one percent annually.<sup>3</sup> Interestingly, responses to an evolving digital culture are themselves in a state of flux, mandating reinvention and reimagination of existing frameworks of law, economics, and technology.

The evolution of culture has always been a product of constant borrowing and diffusion. Therefore, cultural systems<sup>4</sup> are not discrete but a continuum, with cultural boundaries being fluid, and constantly shifting. As such, much of the predominant legal discourse reflects assumptions about cultural systems that are no longer accepted in disciplines such as anthropology and folklore.<sup>5</sup> For instance, much of the IP discourse around the world is still struggling to deal with the legal concepts around cultural evolutions that have emerged as a result of creolisation.<sup>6</sup> This is because conclusive legal discourses are unable to form around cultural products that are not “finished” products. Therefore, cultural boundaries blur and disappear, with native cultural entities combining, recombining, re-emerging, and creating cultural expressions that defy strict IP or legal concepts.

**The challenges of a new digital environment make it imperative for scholarship in India to develop around new legal, economic, and technological frameworks. These frameworks must evolve to bring the fruits of the digital cultural space to people, while fostering innovation, competition, diversity and choice. Figure 1 gives a visual representation of the interactions between culture and IP.**

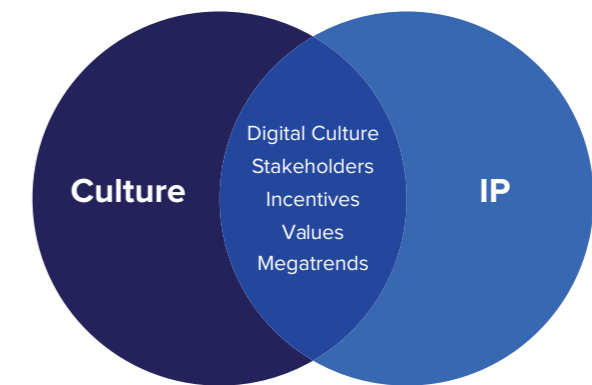


Figure 1

Further, the role of cultural evolution and the correspondent development of IP doctrine and practice have long been shaped by evolutionary perspectives on human society.<sup>7</sup> Much of the international IP frameworks that developed in the 19th century reflected the national systems of the countries at the negotiating table, and the values that they sought to advance or considered important. For instance, since this was the age of the industrial revolution, cultural production contained in local knowledge like folk music was treated as entirely appropriable knowledge, but not as valid systems in and of themselves. Therefore, local knowledge was not thought to be comparable to the products of industrialization. This is reflected in the way IP systems developed in many countries. For instance, although IP protection in many countries was extended to Geographical Indications, no protection was otherwise given to other forms of local knowledge, reflecting prevailing views concerning the devolution of folklore. Further, international IP frameworks also reflected the role of commercial interests of the countries that were deciding the international legal order.<sup>8</sup>

Conversely, today, the identification of cultural evolution and its elements is fundamental to not just IP, but also other attendant policy choices and questions of economic and business value. This is especially since the operation of cultural resources as valuable assets cannot be denied in the contemporary context, given the business models of creative industries,<sup>9</sup> even though there is still a gap between the development in culture and IP. The gap between culture and IP exists in India as well. For instance, because of copyright

law being written with pre-digital technology in mind, artefacts of these assumptions continue in the law regardless of attempts to modernize it.<sup>10</sup> In the EU, there have been significant debates over the new Copyright Directive,<sup>11</sup> the ostensible purpose of which is to modernise copyright rules for the digital age across the region, including increased protections of digital works. In India, similar advances to modernise the Copyright Act, 1957 (Copyright Act) with a view to resolving the debates over increased protection of digital works, intermediary liabilities, and discourses over different approaches to dealing with infringements in the digital space<sup>12</sup> are still evolving.

Further, there is a vacuum in multi-disciplinary research on culture and IP in developing countries as a whole. Most existing research has been focussed on the countries that are part of the Organisation for Economic Cooperation and Development or the global ‘North’. As a result, there is little contextual development in the global south, and particularly in India, over how digital culture and IP interact with each other.

**As such, this series will focus on the peculiarities of the Indian digital cultural ecosystem, primarily centred on three relevant stakeholders – users, businesses, and the Government, as detailed in Section 3. We believe that research focussed on the digital culture and IP in India will help all stakeholders in understanding and exploiting**

digital transformation more efficaciously. More importantly, understanding varying incentives can help stakeholders such as creators, producers, distributors, publishers, users, and policymakers identify common values, which in turn can define future standards in the digital space. To this extent, this series on ‘Contemporary Culture and IP’ will attempt to fill gaps in scholarship and raise foundational questions on law, economics, and policy issues of the future.

## ii. Understanding what Contemporary Culture means for India

### a. Understanding digital culture, and who shapes digital culture

Contemporary culture is rooted in the development of digital technologies, making these technologies both powerful catalysts, and sometimes the focal points of cultural change. The local digital ecosystem in India has burgeoned, leading to more virtualisation of group networks and social identities, and convergence of text and audio-visual media. The evolution of technology is in itself a reflexive process that responds to the evolving digital ecosystem consisting of creators, publishers, distributors, innovators, consumers and other stakeholders. While technology has always allowed stakeholders to respond to changes, the digital ecosystem has allowed the response time to decrease, such that stakeholders can now give their feedback almost immediately. For example, digital platforms and social media platforms like Twitter and Facebook now allow citizens to communicate directly with politicians and Government institutions, as well as offering policymakers new channels to listen to and respond to the wider electorate.<sup>13</sup>

This foundational paper aims to lay the foundations for future research and undertakes two interrelated tasks:

- (i) developing the taxonomy and foundational ideas for the series; and
- (ii) building the foundational frameworks on law and economics for the series to explore in depth, prospectively.

Thus, technological and cultural evolution have become interdependent to the point where correlations between the two, and the boundaries between people and technological artefacts<sup>14</sup> have become difficult to establish.<sup>15</sup> Therefore, in the context of India, this series explores the local meaning and impact of digital culture on the three most prominent stakeholders - the users, the businesses, and the Government; and the relationship between new technologies and cultural innovation, and the latent possibilities for such stakeholders to gain from the digital cultural space. Section 3 will chart the reasons for selecting these three stakeholders, and their relationship with each other.

Therefore, a primary focus in this series will be to view these different incentives from an evolving lens, in an attempt to understand why incentives vary, the role of each stakeholder, and the future opportunities and challenges. The series will also explore new roles, and responsibilities for new stakeholders such as intermediary platforms.

### b. Identifying relevant digital cultural norms and contexts for defining digital culture

The role of IP rights has gained significance in the digital era, shaping both cultural life, and the conditions of communication and information sharing. For instance, in the case of copyright, scholars have argued that it is not merely an “economic vehicle, but a communications instrument relevant to cultural policy.” Copyright laws of a particular country influence democratic expressions of free speech, shaping innovations in the digital cultural space, governing flows of information in the economy, regulating the production and exchange of digital cultural products like books, music, art, and movies; and shaping social relations of communication.<sup>16</sup> Copyright law gives powers of control to authors and subsequent owners, and regulates the production and exchange of meaning and information. Thus, writers, artists, musicians, performers, software programmers, publishers, students, researchers, librarians, teachers, readers, movie-goers, and music fans among others, exist in a web of cultural relations subject to copyright law. However, in the digital world, copyright laws have also generated a new public idea of communication, participation and production, which favours a collaborative model of shared and cumulative cultural dialogue over a proprietary model of cultural production.<sup>17</sup>

The development of digital cultural norms along with IP values play a critical role in defining each other’s scope. A key part of this series, therefore, will be to explore the relationship between digital cultural norms and IP, particularly in areas where there is significant public debate, and a lack of clear policy. For example, the series will explore public and cultural space occupied by intangible goods that currently lack IP protection, that is, ‘cultural commons’, particularly in the Indian context.<sup>18</sup>

Today, due to commercial-technologies permeating citizens’ lives, including the way we access and consume information, we are far more familiar with the technological contexts of our culture. This familiarity with technology, for instance, in the use of smartphones and television screens, allows us to navigate evolving cultural norms even though the digital cultural space itself is constantly changing due to this participation. **However, since the digital cultural space only started evolving a few decades ago, stakeholders cannot rely on any long-standing norms and rules for digital interactions of different kinds. Therefore, stakeholders will now have to develop new cultural norms and commonly shared values, collectively developing rules, depending on the role they play, and their incentives.** An example where stakeholders have come together to do so effectively has been in addressing the issue of child pornography on the Internet, by developing a universally accepted norm of restricting child pornography in a digital cultural context.

The varying perspectives on the evolution of contemporary culture brings us to the understanding that there are two schools of thought in this regard - one that argues that the existing cultures might find themselves essentially recreated in digital form as more and more life experiences play out in digital spaces; and the other that argues that dominant digital culture emerging now is a separate culture unto itself.<sup>19</sup> For this series, we understand the term ‘digital culture’ to mean an uncertain combination of both of these perspectives. We will attempt to capture a multi-dimensional, and context-specific understanding of digital culture in this series.

For the purpose of illustration, we present some of the relevant contexts in which digital culture can be understood:

a. The cultural influence of new media environments and the digitisation process that has aided in the development of new digital cultures in media;

b. The development of common values, agreements, and interactions of different stakeholders in the digital society, and the ways in which people, businesses and the Government communicate with each other;

c. The importance of using IP systems creatively and effectively to increase access, innovation and value generation in the digital ecosystem;

d. The values of building a cooperative shared economy, to own and govern the Internet differently in the digital age, to improve income distribution in cultural supply chains, and address the legacy of an informal workforce.<sup>20</sup>

## 2. Details about the Series: Methodology & Monographs

### i. Methodology

The research in this series will be a combination of desk-based research, and semi-structured interviews and discussions with practitioners and experts. The research will be focussed on investigations into both current and future trends, rooted in the analysis of legal and economic frameworks in India, empirical analyses, and specific case studies. Focus group discussions will be held through careful curation

of practitioners relevant to the subject matter in question, academicians, professionals working at the intersection of digital culture and IP, consumers/users, and policymakers. A series of monographs will be published and some of the discussions within the focus group discussions will also be documented and made publicly available for transparency and feedback.

### ii. Format of the Monographs

The monographs in the series will attempt to provide rigorous and critical insight into how technological transformations are engendering new challenges and opportunities at the intersection of culture and IP.

As such, we propose to examine:

(a) Government policy and existing jurisprudence;

(b) Evolving issues of rights and obligations of content creators, users, distributors, and other public and private stakeholders; and

(c) New theoretical and methodological approaches, while framing critical questions regarding new economic, legal, and regulatory frameworks.

## 3. Identifying Relevant Stakeholders, their Incentives, and a Common Value System

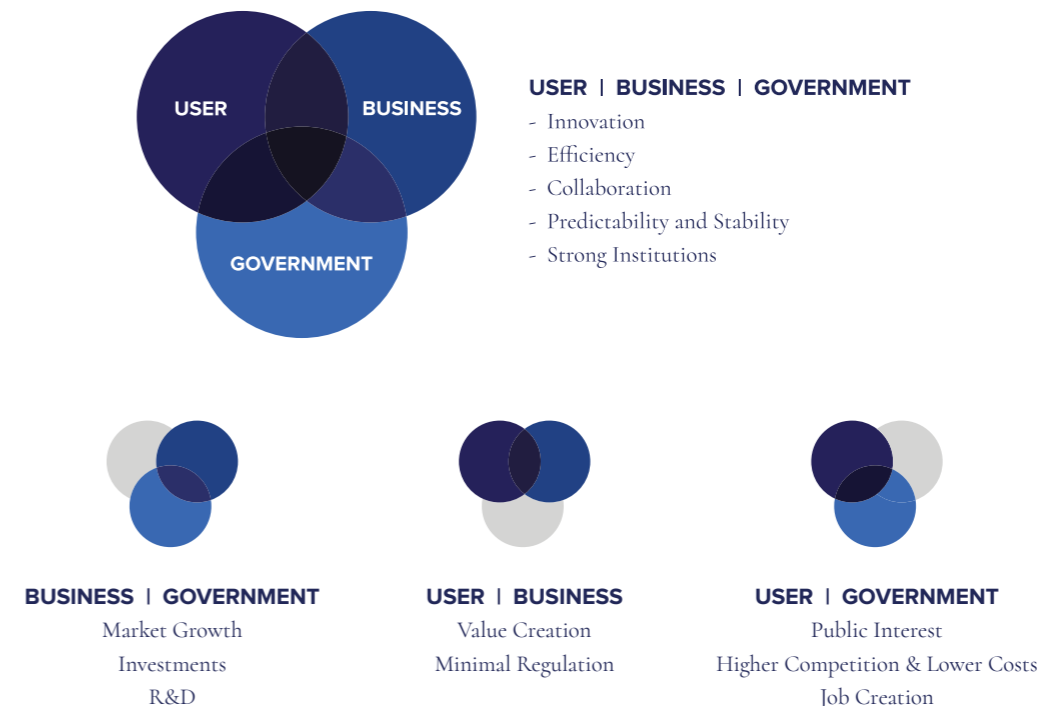


Figure 2

### i. Identifying the Key Stakeholders - Users, Businesses, and the Government

Any meaningful discourse around digital culture and IP is rooted in an environment where there are increasing requirements around IP rights, and their ownership and appropriate use. This is driven by discourses within markets, the policy community, and within communities of users. For instance, questions of ownership, management and fair exploitation of the multiple layers of IP in the case of virtual performances, digital art, and interactive, user-experience integrated gaming systems will have significant impact upon each of the aforementioned communities of stakeholders.

**It is also important to note that the number of stakeholders in the digital cultural space today far exceeds the number of stakeholders that existed in traditional IP ecosystems, before the onslaught of digital technologies. The emergence of digital technologies has led to the rise of intermediaries, who are not only important stakeholders now, but also shape the digital cultural space actively.** This not only includes digital mediums and ‘Over the Top’ (OTT) platforms focused on user-generated

content, but also an entire industry of ‘cultural intermediaries’,<sup>21</sup> working at the intersection of culture and economy, including content creators and producers, social media influencers, writers, and journalists, with the category ever expanding. Taking this expansive digital cultural ecosystem into account, to conduct meaningful studies, this series broadly identifies ‘users’, ‘businesses’, and the ‘Government’ as key stakeholders. These three categories of stakeholders have been carefully chosen for the purpose of the series, because we believe their incentives, frameworks, and values drive many of the evolutions at the intersection of the digital cultural space and IP systems. However, this series does not preclude any other stakeholders, who may add valuable insights to the research.

It is interesting to note that the original internet-architecture with no discernible concentration of ownership, coupled with the small base of users and businesses who encouraged cooperation and fair dealing, provided an effective guarantee as to how parties could and would behave. However, with the

sheer size of digital transformation that soon followed suit, the original internet-architecture underwent significant change, wherein patterns of ownership changed, and the way stakeholders interacted with each other also changed. Therefore, a constant challenge has been one of developing norms of cooperation amongst the stakeholders of the digital ecosystem. This requires developing trust and understanding about how the other parties behave. Cooperation amongst stakeholders is also essential because the Internet experience arises not from the efforts of any single actor, but rather through their collective contributions. Consequently, the emergence of cooperative values and norms to guide collective behaviour is becoming increasingly crucial. Common values and norms, if followed and enforced, can ensure that parties cooperate even when their narrow self-interest would otherwise dictate that they strategically withhold such cooperation.<sup>22</sup>

We understand that the current digital cultural space is populated by multiple parties with

## ii. Understanding Incentives

India is already facing global challenges of the digital era while also grappling with its local challenges. Some issues relating to digital culture and IP that will have significant impact include the creation and destruction of new jobs, new rights and obligations, new patterns of consumption, adoption, diffusion of technology and media, and shifts in the existing contexts of access and choice in new markets.

Thus, this series will investigate the relationships between digital culture, and cultural rights in IP frameworks within which contemporary culture is being created, or being re-created and re-used in the era of digitisation. We will further explore the different incentives with which different stakeholders operate. For instance, while some ‘users’ may be concerned with access to information, ‘businesses’ and individuals would be interested in monetising

varied incentives and interest, and multiple transacting instruments (such as licenses and contracts). Therefore, from the perspective of both users and businesses, the key question will always be about how to come up with a negotiated, common framework to affect policy. Governments and policymakers also find drafting such frameworks more effective, sustainable, and amenable to enforcement. **In identifying the stakeholders in the ecosystem and employing research in understanding their concerns and interests, we will attempt to find a shared set of goals for the future, and craft legal, economic, and regulatory suggestions that channel these multi-party problems into a cogent framework.** Such a framework would seek to avoid the escalation and politicization of disputes, and misunderstandings in the digital cultural space. Figure 2 gives a visual representation of the key stakeholders and the common incentives governing their interactions.

the flow of information, and the ‘Government’ will have a variety of interests in regulating the space, including ensuring growth of innovation and markets, enhancing consumer welfare and competition. The varying incentives are largely heterogeneous, and reflect the heterogeneity in the expectations of these different stakeholders. Therefore, a primary focus in this series will be to understand **why and how these incentives vary for different stakeholders, and how they can arrive at common values** to harmonise such incentives.

It is important to note that changing incentives in the digital ecosystem are a consequence of the growth of Internet access, including the growth of mobile internet, and advances in Information and Communications Technology (ICT), which have enhanced the interconnectedness of economic agents and the availability of cheap

devices. Ecosystem incentives can therefore often be complicated and involve trade-offs between different stakeholders. For instance, with increased digitisation there are incentives to diminish copyright protection and enforcement to increase access to creative works on the one hand; and to increase copyright protection on the other hand to incentivise production and distribution of new innovation. Thus, the exploitation of future opportunities demands a

## iii. Understanding Values

A key part of negotiating amongst different incentives of the stakeholders identified here will be to understand the common values binding them together. **Future technological paradigms will necessitate greater interactions and negotiations between the different stakeholders, at an accelerated pace and under new conditions.** In this regard, global experience shows that invariably, technologies develop first, much before law and regulatory practices do.<sup>23</sup>

new ability to understand differing incentives. Through the monographs in this series, we will document these differing incentives, and then attempt to create a common set of values, which can act as a fulcrum for any subsequent discussion on harmonising incentives and making wider institutional reforms.

Therefore, in this series, we will attempt to understand how technologies are changing in the digital cultural space, and how rules and institutions will need to change to keep pace. To do so, the series will rely on the common values within technologisation, commercialisation, and globalisation, which we believe will continue to drive innovation and policy making globally, and more particularly in India.

## 4. Frameworks Relevant to the Series: Legal & Economic

### i. Legal Frameworks

One of the aims of this series is to study the intersection of IP law and digital culture, and how they influence and shape each other. To do so, we will primarily focus on different aspects of IP laws (such as patents, copyrights, and trademarks) and the intersections therein that are most applicable to digital culture and the forms of new media created in this context. IP systems applicable purely to traditional cultural systems (such as to traditional knowledge) will fall outside the purview of this series. This is due to both the vast body of existing literature in this area, and the focus on technology in the series. However, we will examine the potential role of IP laws and emerging technologies in preserving traditional cultural systems and adapting them to the digital ecosystem (as, for example, the BBC has done with their Augmented Reality (AR) application that allows

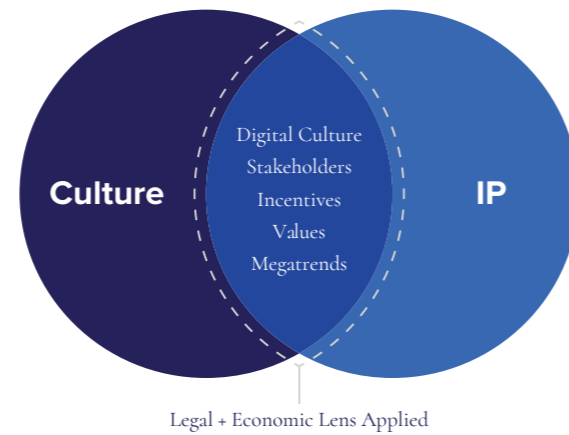


Figure 3

users to view 3D models of museum artefacts). While our analysis will primarily be rooted in Indian laws, we will also look to legal and regulatory frameworks of other jurisdictions where they may prove instructive. A snapshot of a few relevant domestic and international legal frameworks is presented in the table below.

#### Illustrative List of Relevant International Provisions/Legislations

- International Covenant for Economic, Social and Cultural Rights
- Convention on the Protection and Promotion of the Diversity of Cultural Expressions
- Paris Convention for the Protection of Industrial Property
- Berne Convention for the Protection of Literary and Artistic Works
- Hague Agreement Concerning the International Deposit of Industrial Designs
- International Convention for the Protection of New Varieties of Plants
- Trademark Law Treaty
- WIPO Copyright Treaty
- WIPO Performances and Phonograms Treaty
- Trade-Related Aspects of Intellectual Property Rights

#### Illustrative List of Relevant Domestic Provisions/Legislations

- Article 29(1), Constitution of India
- Copyright Act, 1957
- Patents Act, 1970
- Designs Act, 2000
- Trade Marks Act, 1999
- Information Technology Act, 2000

### a. Cultural Rights and IP – Constitution and International Frameworks

The Constitution of India provides for cultural rights, whereby any section of citizens living in India has the right to conserve any distinct language, script or culture of its own.<sup>25</sup> Internationally, cultural rights have been recognised in human rights conventions. For example, the Universal Declaration of Human Rights is one such convention, which states that everyone has the right to freely participate in the cultural life of the community, and to share in the benefits of scientific advancement and enjoy the arts.<sup>26</sup> It also provides for authors' rights by protecting the moral and material interests resulting from "any scientific, literary or artistic production" of an author.<sup>27</sup> The International Covenant on Economic, Social and Cultural Rights also includes a similar provision.<sup>28</sup> Interestingly, although these human rights charters provide for the recognition of authors' rights, human rights and IP laws grew as two separate bodies of law internationally until relatively recent times.<sup>29</sup> There are two

major approaches taken to the interface between these two bodies of law. One views human rights and IP as fundamentally in conflict, whereby the latter undermines the former. Some of the areas of conflict include the commercialisation of traditional knowledge, restriction to the access of essential commodities, and increasing levels of minimum IP standards under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).<sup>30</sup> The other approach views human rights and IP as fundamentally compatible, with the issue being that of effectively striking a balance between incentives and access.<sup>31</sup> We will explore the intersection between human rights and IP rights in more detail over the course of the series, and also examine existing literature on potential ways to resolve the tension between these two areas of law.<sup>32</sup>

### b. IP Rights - Objectives and Overview of Frameworks

The basis for IP rights lies in property rights. They are meant to allow creators of intellectual labour to benefit from their work or investments by providing them with exclusive, time-limited rights to control the use of their creations, while also promoting innovation, and economic and social development by making the works available to the public after specified periods of time.<sup>33</sup> Copyright, patents, and trademarks are the three traditionally recognised forms of IP.<sup>34</sup> IP frameworks were conceptualised in a context where there was clarity on the creator of the works, and where piracy was difficult and expensive, given the lack of efficient mechanical copying technologies.

However, the Internet and digital technologies have substantially changed the creative landscape in the years since, transforming the digital cultural space. For example, digital technology, for the first time, offered the capability to make and easily disseminate virtually an unlimited number of perfect copies of any work in digital form, making piracy significantly easier than ever before.<sup>35</sup> Consequently, a prime objective of this series will be to examine the current IP system in India and the rights it seeks to protect, in order to understand its applicability and relevance to the future of content and the digital cultural space, enabled by emerging technologies.



### c. International IP framework

Most countries provide for common minimum thresholds of protection for IP rights pursuant to international conventions administered by the World Intellectual Property Organisation (WIPO) and the TRIPS administered by the World Trade Organisation (WTO). These treaties aim to harmonise the different levels of protection given to creators in different jurisdictions and provide creators clarity on how their rights would be treated in different countries. Some of the first international standards for IP rights were recognised in the Paris Convention for the Protection of Industrial Property and the Berne Convention for the Protection of Literary and Artistic Works.<sup>36</sup> Thereafter, there have been other treaties that have dealt specifically with different types of IP, including the Patent Cooperation Treaty, the Hague Agreement Concerning the International Deposit of Industrial Designs, the International Convention for the Protection of New Varieties of Plants, and the Trademark Law Treaty. The WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty (together the “Internet Treaties”) were both treaties specifically enacted to deal with rights in the digital context. The former, which is a special

### d. Indian IP framework

India is a member of the WTO and is subject to TRIPS, and has acceded to many of the treaties administered by WIPO,<sup>42</sup> including the recent accession to the Internet Treaties.<sup>43</sup> It has also enacted various legislations relating to the protection of different kinds of IP, sometimes introducing/amending them to make India compliant with TRIPS or WIPO standards.<sup>44</sup> For instance, the text of the Protection of Plant Varieties and Farmers’ Rights Act, 2001 and the Semiconductor Integrated Circuits Layout-Design Act, 2000 themselves specify that they were introduced pursuant to TRIPS.<sup>45</sup> Similarly, the Information Technology Act, 2000 (IT Act)

agreement under the Berne Convention, extends copyright protections to the digital environment, and recognises specific rights (such as those relating to different modes of access) in the digital context.<sup>37</sup> The latter deals with the rights of performers, and of producers of phonograms (sound recordings).<sup>38</sup>

Recognising the commercial value and economic potential of IP and its role in trade relations, the WTO introduced TRIPS, which incorporated by reference parts of the Paris and Berne Conventions, and aimed to further harmonise the ways in which IP rights were protected and enforced around the world.<sup>39</sup> Since almost all countries were part of the WTO, TRIPS extended certain minimum standards of protection to IP rights on a global scale.<sup>40</sup> Although countries have some leeway in deciding how to tailor their domestic laws to fit their needs, TRIPS includes national treatment and most-favoured-nation clauses. The latter requires that any country providing for any protection that is more extensive than the standards set out in TRIPS must apply the stronger protection to all WTO partner countries,<sup>41</sup> so that there is no discrimination in the application of IP policies.

which requires intermediaries to take down copyrighted content from their platforms on receiving notice of such content,<sup>46</sup> and the Copyright Act which was amended in 2012 also include provisions which harmonise the law with the Internet Treaties.<sup>47</sup>

India also has a National IPR Policy which lays down the roadmap for the future of IP in the country, and aims to frame legislations that balance the interests of rights-holders with larger public interest, commercialise IP rights, and effectively administer and enforce such rights.<sup>48</sup> Therefore, the protection of IP rights is an important policy agenda for India

and is set to become increasingly relevant over the course of the coming decades.

However, India is perceived in some circles as not having robust IP protection standards. For instance, the Office of the US Trade Representative put India on the priority watch list last year, for what it called “longstanding challenges in [India’s] IP framework and lack of sufficient measurable improvements”,<sup>49</sup> but this rating has been challenged by sections of Indian industry,<sup>50</sup> and has also been criticised by Médecins Sans Frontières (or the Doctors Without Borders) for being “anti-

public health”.<sup>51</sup> Similarly, the US Chamber of Commerce’s IP rights advocacy arm, Global Innovation Policy Centre in its 2019 report ranked India 36th out of 50 countries, and found that while India had made some real strides in improving its domestic IP framework, rights-holders still faced significant challenges with counterfeiting, physical and digital piracy, and pendency times in the Court systems, among other areas.<sup>52</sup> We will explore other such issues, and specific legislations and provisions in detail over the course of the series.

## ii. The Economic Value of Digital Culture: An Understanding of the Economic Framework

It has been stated that the current models of the digital economy are far too narrow to adequately capture its essence, and therefore in the global digital market, the economy is not a fixed idea, rather a fluid one. While traditionally, economic activity is organized into sectors or industries bound by institutional norms, rules, and practices concerning production and distribution of goods and services for that sector, the emergence of data and artificial or machine intelligence as the means of production has effectively destabilised the very logic of such organization. For instance, technology giants like Google, Apple, and Facebook are all attempting to break into the financial ecosystem (through investments in digital payment systems like Apple Pay, Google Pay, Facebook Payments, and WhatsApp Payment), suggesting an economic future of hyper-consolidation, and breaking the myth of traditional industry silos. As such, discursive formations of the digital economy will play a pivotal role in its future material manifestations,<sup>53</sup> and financial technology will engender new business models based on the integration of finance and ICT.<sup>54</sup>

The digitisation of cultural products and their distribution via the Internet has also had an immense impact on multiple industries, most prominently on the creative industries. As such,

the shift to a digital cultural era has impacts on both identities, and traditional cultures, transforming the means by which knowledge will be transmitted to future generations, as well as the interactions of people with it. In this context of new cultural content creation in visual arts and literature, live performing arts, film, media, broadcasting and publishing, the core of the industry lies as much in the creation of the content, as the economic value of the content and the content creators, making the interaction between art and economics the central theme of ‘cultural economics’.<sup>55</sup>

The economic significance of IP-intensive industries has been highlighted in several recent studies from developed markets. A US Commerce Department study demonstrated that IP-intensive industries, particularly copyright-intensive industries contributed to 5.1 million jobs and grew by 46.3 percent between 1990 and 2011. A 2013 European Commission (EC) study showed that about 39percent of total economic activity in the European Union (EU) (about €4.7 trillion annually), and about 26 percent of employment in the region was generated by IP-intensive industries. In some specific industries like the music industry, there have been considerable shifts or attempts to create new business models to reflect new

consumer behaviours.<sup>56</sup> For instance, the journey of music consumption, from the days of Napster 1.0, to The Pirate Bay (TPB), and then to Spotify has been an interesting one to show case the shift in the way people consume music.

Napster and TPB were large peer-to-peer file sharing services, where the owners of the services could not control the content users shared on the service. The music industry widely criticised the services for promoting piracy, and not allowing creators to gain any pecuniary benefits from their work. As a result, these services faced a number of lawsuits, demanding they be shut down. Spotify on the other hand was launched as a streaming service, which positioned itself as a music producer (by signing licensing agreements with major record labels and independent labels), in contrast to “piracy” alternatives. Unlike Napster and TPB, users on Spotify cannot upload their own content, and users have to pay a certain fee to access most of its services. In 2010, Spotify in added a social dimension to the service, wherein users could create and

publish their own curated playlists.

Spotify, understanding the parallel demands of two important stakeholders, that is, the users and IP owners managed to create a business model distinct from Napster-TPB, and become hugely successful. They provided users with quality, instant availability and user-friendliness – above the fact that the service was digital, and legal. They also provided content providers a new distribution channel to a large customer base through a service safe from illegal use and with a business model in place to protect the income streams of IP owners. **As such, legal music services such as Spotify are thus being incorporated into the income streams of large incumbent production firms. Further, peer-to-peer and streaming technologies are largely being transformed from a disruptive to a sustaining force.**<sup>57</sup> However, it is still unclear as to what this transition will look like in India, and what new cultural and creative business models and IP frameworks will emerge to support large-scale works in the future.

### iii. The Social Value of Digital Culture:<sup>58</sup> An Understanding of the Socio-Cultural Framework

Unlike the economic value of cultural heritage, its social value is subject, mostly, to qualitative assessment.<sup>59</sup> To this extent, the social-cultural aspects of digital culture in India require an understanding of new modes of inter-cultural interpretation. A fundamental debate at the heart of cultural evolution and the IP framework has been regarding the contours and objective of culture, and its products. This has been characterised by the tension between culture being regarded as a ‘public good’, while also being regarded as a private property as per the objects of IP laws.<sup>60</sup> It has been argued that while knowledge, information and culture are seen on the one hand as public goods, and hence endeavoured to be made accessible to all, to use, re-use and circulate, learn from, keep, discard, or do any number of other things with; culture, when viewed through the lens of ownership, when it becomes the subject of copyright,

becomes inaccessible, and exercisable only through a series of exclusive rights.<sup>61</sup>

This difference in sociological and anthropological ideas about the nature and objective of ‘culture’ as a public good, juxtaposed with the legal concept of private property, will be of particular significance in the digital era. This is because of the legal and economic concerns in the digital era around innovation and creativity, where the focus is on high IP standards. Most of these standards were established in developed countries, and it will be interesting to see how they challenge the diffusion of new ideas, texts and technologies in India.<sup>62</sup> Hence, in the analysis of digital culture and IP in this series, we will focus on how to use IP systems in ways that can better align with these divergent ideas of culture, such that IP systems can be used creatively to gain more

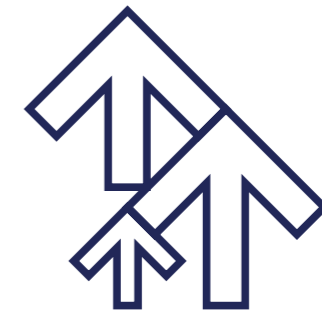
access, protection, and monetisation of cultural objects. As such, monographs in the series will discuss strategies, and road maps to chart the

potential impact of evolving digital technologies in India, her societies, cultures, and people.

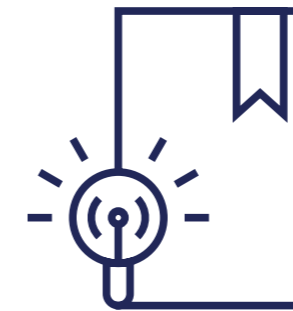
## 5. Megatrends that will Shape Digital Culture and IP in India



**i. Changing Patterns of Consumption**



**ii. Specialisation & Scale**



**iii. The Evolution of IP Frameworks**



**iv. Privacy and IP**



**v. Future of Work in the Context of Augmented Intelligence**



**vi. Changes in Regulatory Architecture**



## i. Changing Patterns of Consumption

India forms a large consumption base for online content, although only 41 percent of the population uses the Internet.<sup>63</sup> While this is rising (the percentage of Internet users grew 21 percent in 2018, for example)<sup>64</sup>, given that 87 percent of the population has mobile subscriptions<sup>65</sup> (although less than half of them

own smartphones)<sup>66</sup>, and that the number of persons accessing the Internet through their mobile phones is increasing,<sup>67</sup> Internet use can be expected to grow over time, as ICTs become all pervasive.

*a. India is consuming content in counterintuitive ways – older generations are at par with millennials, and the growth in consumption in rural areas will remain hard to monetise.*

It is no surprise that India's Internet consumption is increasing, especially due to an increase in mobile phone subscriptions. Further, almost all Internet users in India stream videos online<sup>68</sup> and over 90 percent of users watch videos on their phones.<sup>69</sup> The consequent increase in online consumption is leading to an increased appetite for online video with surprising demographic trends. Interestingly, there is data to suggest that online video consumption is not restricted to 'millennials', but that relatively older demographics (those between 35-55 years)

spend more or equal time than the average watching videos online.<sup>70</sup> Furthermore, users in small towns (with populations of up to five lakhs) spend the most time watching online content<sup>71</sup> – however, such users are least likely to pay for content-subscriptions. All these unconventional patterns of Internet-usage will pose interesting questions for the future of streaming services, demand-driven media consumption, and challenges linked to monetisation and value generation through such consumption.

*b. While the OTT space is growing exponentially, traditional media remains an important channel of consumption and monetisation.*

While traditional mediums such as television still account for a majority of video-consumption, there is a gradual but definite shift to consumption of online content. This shift poses transitional challenges for traditional media and has implications for the kinds of content likely to be created in the future.

The increasing consumption of digital content has led to a veritable boom in the number of companies offering video and streaming services, specifically for online consumption. India's video OTT market is set to become one of the world's top 10 markets within the next few years,<sup>72</sup> and platforms like

Hotstar, Netflix, Amazon Prime Video, Voot and others are all vying to capture market share. Additionally, combinatorial formats are being increasingly employed, which are only possible on digital platforms and could hasten the shift to the consumption of digital content. For example, Netflix has experimented with an interactive "choose-your-own-adventure" format, most recently in an episode of the popular Netflix series "Black Mirror" titled "Bandersnatch". This may herald the beginnings of the combination of video and gaming formats. Netflix has also released a playable version of one of the games referenced in the episode.

However, traditional media continues to be relevant, and still constitutes the media of choice for a majority of Indians. Consequently, traditional media still attracts a majority of the total advertising revenue in media.<sup>73</sup> Although advertising expenditure on digital media is the fastest growing (with expenditure expected to continue to grow by 30 percent in 2019 by some estimates), expenditure on traditional media is expected to continue to grow as well, and account

for 80 percent of advertising expenditure in 2019.<sup>74</sup>

Although the shift to digital media is likely to be gradual, it presents significant transition challenges for traditional media companies. Such companies will have to transform into digital content companies while continuing to produce content over traditional media platforms, and come up with workable monetisation models for both.

*c. India's propensity for consuming "free" content may inadvertently undermine smaller content creators.*

Most Indians primarily consume free digital content through a few key platforms. The methods of curation and advertising models of such platforms have implications for creators, users, competition, and on public discourse.

While some users are willing to pay for and subscribe to OTT streaming services, the majority of media consumed online is currently free. The top websites visited in India are Google, followed by YouTube, and then Facebook.<sup>75</sup> Almost all Internet users watch videos online, a majority stream television content through the Internet, and 31 percent play games that are streamed online.<sup>76</sup> This means that the primary mode of consumption of data online for a majority of internet users in India is through search platforms and social media companies. The algorithms and methods of arranging information that are employed by such platforms plays a vital role in what is consumed by users, and therefore on the kind of content that is created.

Consequently, measures such as Google algorithms down-voting websites that don't have mobile-friendly versions,<sup>77</sup> Facebook and other platforms curating content tailored to each user,<sup>78</sup> and YouTube's changes in policy regarding the monetisation of videos, eligibility conditions for partner programs, etc,<sup>79</sup> have implications not only for society, but also for creators and smaller companies which use these platforms to monetise their businesses.

Key questions to analyse here would be on the economic viability of online businesses wherein the majority of media consumed online is free (possibly by making both free and paid content available on the same platform – also known as the "freemium model"); or whether the way in which platforms personalise and curate content would need to be re-evaluated from the perspective of the impact that they have on the content ecosystem, such as the economic viability of smaller platforms or the visibility given to niche content creators.

*d. There is no “free lunch” for Indian content consumers and content creators – monetisation models will remain a central consideration.*

Digital advertising is the primary monetisation model used by most free digital platforms and provides a way for digital content creators to get compensated. Since most content available on platforms such as Google, YouTube, and Facebook is free, their monetisation model primarily relies on revenue from digital advertising, providing a way for content creators to make a living.<sup>80</sup> Advertising models online can range from the “AdWords” model of matching search queries to advertisements and social media marketing, to the display of banners and other forms of visual marketing. However, the volume of data collected, along with a lack of transparency around advertising practices has raised significant concerns around privacy rights of users.<sup>81</sup>

There are often other issues with monetisation models that rely primarily on user-generated content as well. For example, creator burnout is a significant problem on YouTube.<sup>82</sup> Furthermore, although the IP of creators is central to platforms that rely on user-generated content, many of them include terms of service which grant the platforms a blanket license over content.<sup>83</sup> For instance, Instagram’s terms of service require users to grant the platform “*non-exclusive, royalty-free, transferable, sub-licensable, worldwide*

*license to host, use, distribute, modify, run, copy, publicly perform or display, translate, and create derivative works of your content (consistent with your privacy and application settings)”*, thereby granting Instagram significant control over the content.<sup>84</sup> While some form of a limited license from creators is necessary to effectively administer platforms, such a broad license, especially in a context where there is no room for negotiation and where platforms profit from such IP may be problematic.

The existing issues coupled with the changes that are likely to occur in content and consumption models due to technological shifts give rise to some key questions for the future. These include questions on the evolution of alternative monetisation models that can be more equitable to creators – such as a subscription-based model, or a version of HitRecord’s community-based creation model; whether new monetisation models can be more responsive to patterns of demand – such as the provision of differentiated products and services to different categories of consumers – in order to maximise access; and whether advertising-based monetisation models can influence the very nature of content made available through digital platforms.

*e. The emergence of new network infrastructure has the potential of widening rather than bridging the urban-rural divide in terms of consumer access to the digital ecosystem.*

The effective utilisation of emerging network technologies such as the fifth generation of networks or ‘5G’, will require significant infrastructural changes. It is likely that there will be a lack of investment in such infrastructure in rural areas, potentially widening the existing urban-rural divide in levels of consumer-access.

The increasing consumption of on-demand videos and other content requiring significant Internet bandwidth coupled with infrastructural challenges has meant that the Internet speed in India is relatively slow.<sup>84</sup> 5G technology is expected to enable a paradigm shift in network-capacities, promising speeds of more than one gigabit per second.<sup>86</sup> Such speeds may become vital for the effective consumption of content created for AR/Virtual Reality (VR) platforms, and innovations in Internet of Things (IoT), healthcare, and transport industries.<sup>87</sup> More specifically, three categories of use cases have been identified for 5G networks – enhanced Mobile Broadband (eMBB) for high-speed broadband, AR/VR; massive Machine-Type Communications (mMTC) for low-bandwidth, machine to machine communications such as for IoT and some

aspects of smart cities; and Ultra-Reliable and Low-Latency Communications (URLLC) for use in autonomous vehicles, healthcare, industrial automation, and the like.

However, the introduction of 5G technology requires an overhaul of existing network infrastructure, in terms of towers, switching equipment, devices and so on. Furthermore, 5G deployment is likely to occur in phases, with eMBB likely to be the primary use case in early deployments.<sup>88</sup> Indebted telecom service providers are unlikely to invest in building the required infrastructure in rural areas of India unless there is evidence of growing consumption demand, and the costs of new handsets are likely to be unaffordable to many as well. Given that only around a third of India’s population lives in urban areas, 5G (coupled with new 5G enabled devices) could potentially exclude a majority of the population from being able to access heavy-bandwidth content (reliant on AR/VR, for example) and advances in the IoT space that may be exclusively accessible on 5G networks. Policymakers and businesses will need to consider potential ways to bridge this imminent access-divide.



## ii. Specialisation and Scale

The emergence of new industry-level challenges of increasing specialization and achieving scale in the digital cultural space may constitute another important trend. Such challenges will arise due to the reduction in the number of links between producers and consumers, and shortening of the supply chain on the one hand, and the fragmentation of supply chains

and hyper-specialisation in certain industries like media and films on the other. Since the role of technology will remain uncertain, a related issue will be one of management of both business models and of IP rights, as patterns of production transform gradually.

### *a. The globalisation of India's cultural and creative industries will be limited by the lack of domestic regulatory specialisation.*

The levels of regulatory specialisation in the Government may need to be reviewed, as the need for digital cultural and creative services to access international markets gains greater prominence. For instance, digital content created in India with cultural sensitivities inspired by traditional content regulations might not find an adequate global market, and may prohibit such content to be created at scale. There may also be other regulatory barriers that discourage innovation. For instance, with respect to the use of certain digital technologies such as Artificial Intelligence (AI) in creative sectors, the question of lack of regulatory specialisation will become a larger challenge. If AI is used to automatically generate scripts, as has been done by Toyota Mirai with IBM<sup>89</sup>, or ROSS,<sup>90</sup> which offers a whole range of AI supported services like reading through case law and offering a precise collection of cases, a key regulatory challenge will be to understand how to build and nurture a culture of digital innovation, so as to enable such products and services to be created at scale, and made global.

This leads to another related question on the significance of a re-imagination of domestic IP frameworks. For instance, one of the main principles of traditional IP systems has been transparency, and centralization, including in patent applications, registration requirements, and maintenance of public records by IP offices to enhance innovation and accrue credit and ownership. This is now changing due to the privatization of functions traditionally undertaken by the public sector and the emergence of new technologies such as blockchain, which work on the principles of anonymity, speed, and decentralization. These new technologies promise to offer a secure means of record keeping, leading to a blurring of the lines between public and private spheres.<sup>91</sup> Yet, there is little or no regulatory specialisation related to the application of blockchain-based technologies in the country.

### *b. The evolution of the digital cultural space due to technological advancements may prompt a review of traditional concepts of ownership and property.*

The emergence of new technologies and the consequent changes in laws surrounding digital products (say online books, music, and movies) have caused challenges to the traditional notions of ownership and property rights. Jason Schultz, who describes ownership as “a concept about our expectations and our relationships to the things we buy”, and which the law has protected until the digital age, states that ‘ownership’ in the digital age has led to challenges to traditional cultural and economic expectations of consumers. Therefore, the ownership of digital products like e-books, e-music, phones, etc. does not always mean that ownership in the product is final for the person buying the product. For example, buying an Apple iPhone simply means owning the hardware (physical case), with Apple owning all the software and data inside it.<sup>92</sup> Buying an e-book on Amazon also means that the Kindle content is licensed to the purchaser, and not “sold”, as explained in Amazon’s End User License Agreement (EULA).<sup>93</sup> As such, digital retailers argue that the EULA defines a consumer’s ownership rights. Therefore, traditional laws on property and ownership which give ‘owners’ the right to own, sell, loan, and distribute their products, can no longer apply in the same vein to certain digital products like an e-book purchased for a Kindle, or a movie

that can only be streamed on a particular device and account, because in the latter case, the rights are defined by license agreements and contractual frameworks. Further, the transition from ownership to licensing frameworks also causes other disruptions to traditional property law concepts. This is because license terms can vary widely – leading to user-uncertainty about what rights they actually acquire.<sup>94</sup> It has also been argued that the shift from ownership to licensing has impacted not only individuals, but also educational and cultural institutions. For example, when public libraries buy physical copies of books, they are free to distribute it any number of times. In case they buy a Harper Collins e-book, they can only lend it 26 times, after which the copy self-destructs.<sup>95</sup>

This inevitably leads us to question whether the emergence of new technologies create new conceptions of ownership and property rights, and whether users, businesses and governments need to collectively reimagine conceptions of ownership, and licensing. Further, digital rights management and its interplay with concepts such as network-neutrality, innovation, users’ rights and IP rights will continue to remain significant.

*c. The proliferation of digital products may give rise to unconventional modes of IP-infringement and necessitate new tools of enforcement.*

The rapid development of the digital cultural space necessitates deeper thinking about possible new legal tools for the enforcement of IP rights. For instance, the IP Office in the UK, in its 'IP Enforcement Strategy 2020' found strong emerging trends that posed a major threat to IP rights, including increased sales of high-value counterfeit items such as handbags, watches and electrical appliances, and a strong growth in the use of social media to facilitate access to counterfeit goods.<sup>96</sup> As such, the UK aimed to carry out a number of reforms, including easier reporting of IP crimes, aggregation of IP crime databases to help law enforcement agencies,<sup>97</sup> and the possibility of introducing new legislations to govern companies involved in the distribution of counterfeit goods.<sup>98</sup> Specific legislative reform strategies in the UK include

examination of legislations that may be used to address the growing problem of illegal streaming via set top boxes, and investigating the scope for legislation to take action against search engines, ISPs and platforms that facilitate or otherwise support those involved in infringement and counterfeiting.<sup>99</sup>

Tackling new modes of infringement will also require various stakeholders in India (users, businesses, and the Government) to develop new networks of trust, common norms, and responsive rules. Future modes of IP-infringement may also engender a new understanding of IP laws and enforcement in India.

*d. Technological developments in the digital cultural space may make it harder for smaller brands to compete against bigger brands.*

Technology has enabled creative production at scale, resulting in a confluence of a range of services in the digital cultural space, which used to be traditionally separate, individualistic, and specialised. Predictably, this leads to unique challenges. For instance, increased threats of counterfeit trade mean that companies cannot continue to rely on conventional legal remedies to combat brand abuse on the Internet. A multi-faceted and proactive trademark protection strategy that complements existing legal protection will become an imperative.<sup>100</sup> Perhaps the answer will lie in going beyond the law, for example, by protecting a company's "brand", or a company's intangible IP assets, which now accounts for substantial business value, particularly in the knowledge sector.<sup>101</sup>

Today a company's "brand" might be the single most distinctive identifying element, and perhaps the most valuable financial asset,

particularly during initial public offerings. In the Indian context, where there are relatively fewer "brands" compared to similarly large economies, it will be interesting to see how smaller companies will manage to build their brands, in the presence of bigger brands. For instance, the digitisation of products and services will have a profound impact on the Indian market, with technology sometimes creating barriers to the entry of new firms. Established platforms like YouTube, while lowering the barriers to entry in the content and creative industry, also present challenges to content creators who get affected by YouTube's algorithms, which promote and recommend certain content over others. Content creators have also complained that to get favourable results out of the algorithmic software, they are pushed to constantly create content, or get pushed to irrelevance.<sup>102</sup>

Therefore, for a small content creator to be

able to legitimately create a brand, she would have to depend on coping with the demands of YouTube's algorithm, and therefore to scale up operations to compete with other established content-brands would become an even bigger challenge. With market power becoming a significant source of value,

particularly in the new digital cultural space, the impact on competition, content creators, and consumer welfare remains uncharted.



**iii. The Evolution of IP Frameworks**

The nature, importance and economic implications of IP are very different today than when laws and regulations around IP were originally framed. Today, IP plays a central role in the functioning and economic viability of content companies which rely on the Internet

to operate and companies that are involved in developing new technologies and related software/hardware. Consequently, existing IP frameworks may need to be reimagined to adapt to ecosystem changes.

*a. Current IP frameworks do not respond to emerging technologies.*

IP laws will have to be reformulated to strike a balance between promoting innovation, ensuring access, and enhancing market-competition. For example, as discussed previously, one change that has significantly impacted consumers, content producers, and companies alike, has been the development and use of algorithms by platforms like Google and social media platforms like Facebook, which personalise search results/content for each user, and impact the content that is made available for consumption. While protection of software under IP laws (especially patents) has been the subject of much debate, IP protections for algorithms are still a relatively undeveloped area in Indian jurisprudence.

New technologies and algorithms will also have significant implications on users, businesses, and the Government. Consider for instance, the fact that the existing IP law framework provides for similar protections to all types of products within certain classes of IP, regardless of the inherent differences in them. An example is that the term of protection provided to all kinds of patents is the same, although the investment of time

and testing processes in pharmaceuticals, as opposed to digital technologies and software can vary widely.<sup>103</sup> Therefore, future IP frameworks will have to adequately account for such differences. One potential way would be to recognise or create specific forms of IP for some technological innovations, as has been done with standard essential patents (SEPs), for example. SEPs are patents which apply to specific inventions and are necessary to comply with technical standards developed by standards-development organisations. This would mean, for example, that in order to manufacture standards-compliant phones, every manufacturer would have to use technologies that are covered by some SEPs. Therefore, SEPs can be very valuable to their patent-holders, and may provide a substantial source of revenue, especially where the SEPs cover technologies that are implemented in various products sold to a significant customer base. Consequently, to ensure access to the technologies covered by SEPs at reasonable prices, holders of SEPs usually commit to license them on "Fair, Reasonable and Non-Discriminatory" (FRAND) terms, although patent-holders can usually fix their own prices for licensing their patents.<sup>104</sup>

Another possible way to add greater nuance to the domestic IP framework would be to consider providing higher levels of protection to some critical aspects of technological or content innovations, or to potentially factor in the level of risk undertaken by a party in deciding the allocation of IP rights. As a corollary, it is also important

that in accounting for such ecosystem-changes, policymakers exercise necessary caution against introducing overbroad IP protections which might hamper innovation or competition, and protect against abuses of existing laws (as with patent trolls).

*b. Challenges with addressing digital piracy have sometimes led to the formulation of overbroad enforcement at the cost of balanced safeguards.*

The Constitution of India gives the Parliament the exclusive right to formulate laws on “Patents, Inventions and Designs; Copyright; Trademarks and Merchandise Works”, which empowers the Parliament to form laws on IP. However, widespread piracy of digital content, difficulties faced in addressing and prosecuting infringement online, and slow litigation processes have meant that content producers have pushed for more stringent action on those pirating content online. Unfortunately, this has sometimes led to excessive and potentially unconstitutional legislation, such as the Karnataka Prevention of Dangerous Activities of Bootleggers, Drug-Offenders, Gamblers, Goondas, Immoral Traffic Offenders and Slum Gamblers Act, 1985 (Karnataka Goonda Act), which was amended to include offences under the Copyright Act and the IT Act.<sup>105</sup> It places “audio and video pirates” at par with a host of other categories of unrelated offenders such as money launderers and sexual predators, and provides for preventive detention, which potentially amounts to prior restraint of expression,<sup>106</sup> arguably a disproportionate measure for combating content piracy.

Notably, many other narrower measures have also been taken to combat piracy, with the Union Government approving the proposal of the Ministry of Information and Broadcasting to amend the Cinematograph Act, 1952<sup>107</sup> to penalise unauthorised duplication of films,<sup>108</sup> and advertisers coming together with the music and film industries to form a voluntary code to not advertise on websites that host infringing content.<sup>109</sup> The Government, in its recent draft national e-commerce policy has proposed setting up a body to identify websites that host infringing content,<sup>110</sup> and Maharashtra’s Cyber Digital Crime Unit, which was set up to combat piracy<sup>111</sup> has shut down certain websites hosting pirated content as well.<sup>112</sup> Furthermore, new interactive media formats (such as with “Bandersnatch”, the Black Mirror episode discussed previously) and anti-piracy measures adopted in the gaming world may also serve to make piracy more difficult in the future. Key questions in this context will centre on a combination of alternative mandatory and voluntary industry-measures that can effectively address digital piracy, without infringing on other rights.



**iv. Privacy and IP – an Evolving Debate**

The future of the digital cultural space is hard to imagine without the co-existence of privacy and IP debates. Even in transition economies such as Pakistan, research has shown that digitisation has had a strong impact on virtual social capital,<sup>113</sup> that is, the strengthening of

social interactions between individuals or between individuals and businesses. In these interpersonal and social interactions which are rapidly being transformed by technology, privacy and IP debates will continue to be relevant in new forms and manners.

*a. The digital cultural space will witness the rise of unfamiliar challenges owing to technological evolutions*

Modern debates around privacy are largely about the role of technologies. Therefore, some of the questions that will gain immense importance are those related to the portability of data, big data, convergence of technologies, compliance, and informational ethics. An example in this regard is that of the use of ‘Deepfakes’ online.<sup>114</sup> In cases where Deepfake technology has been used to manufacture non-consensual videos, it has given rise to several legal questions over IP (copyright infringement for the owner of the original video, and the owner of the photos), privacy (both under common law and specific privacy legislations), defamation, harassment, human rights, and ethics.

Further, with an increasing interaction of technology and society, new circumstances are being created, which require clarity on the intersection of IP and privacy. For instance, there is a lack of legal clarity over the management of ‘digital assets’ that often reveal personal or sensitive personal data, and are created, hosted, and shared on intermediary platforms like Facebook and Google. The issue of management of digital rights becomes even more problematic in cases of the death of the owners of digital assets. Due to the express lack of legislations or legal clarity over post-mortem privacy<sup>115</sup> concerns of the deceased, such issues are often subject to contract regulation (terms of service) of the internet

intermediary. For instance, Facebook’s terms of service<sup>116</sup> specify that even though the user of the Facebook account ‘owns’ the content shared on the platform, Facebook has a non-exclusive, transferable, sub-licensable, royalty-free and worldwide licence to host, use, distribute, modify, run, copy, publicly perform or display, translate and create derivative works of the user’s content. This license continues until the deletion of the user’s account. However, in cases of death, there is no clarity over who owns the IP over the digital assets and content of the user, and there is no uniform mechanism to completely preserve post-mortem privacy of the deceased. Few countries in the world have made attempts to provide legal clarity over such issues. In the United States, an attempt has been made over the years to formalise a legislation,<sup>117</sup> however, there is no federal law yet. France has also attempted to recognise<sup>118</sup> the use of software tools for the post-mortem transmission of digital assets of the deceased.

These questions will become particularly relevant in India, which is one of the biggest markets for internet companies. As such, the future of the development of IP and privacy safeguards in the digital cultural space will revolve under the identification of such new challenges, many of which will be multi-dimensional in nature.

*b. The intersection of privacy and IP will take centre-stage in the future debates round digital culture in India.*

One of the possible debates for the future will be over the evolution of ‘privacy’ as a form of IP, and the possible interactions between the laws of privacy and those of IP. One such example is the rise of social media privacy legislations in the United States and their interactions with IP issues like trade secrets. Social media legislations in the United States seek to regulate the use of social media by employers and educational institutions, that is the laws prohibit employers and/or higher education institutions from requesting or requiring employees, prospective employees, students, or applicants to provide access to their social media accounts.<sup>119</sup> However, the social media legislations have led to employers being concerned about employees violating and stealing company data, and protectable trade secrets of the company. The rise of litigation in the United States on these matters points to the fact that the ability to differentiate between ‘personal’ and ‘business’ ownership of data and information is becoming extremely difficult.<sup>120</sup> In India, the future of ‘privacy’ and IP will see more of such interactions between the two, and it will be interesting to see if the law on the breach of confidence will have implications on the laws of informational privacy, and vice-versa.

It is important to note that without a coherent conception about the nature of a person’s interest in her personal data, it is difficult to design a legal regime to protect individual interests appropriately. In this regard, arguments have been advanced for looking at informational privacy with the lens of property rights, and affording appropriate protection, which would simplify the task of constructing a legal regime to protect the ‘interest’. Therefore, traditional IP protections would prove to be a mismatch with the

construct of an evolving digital space, simply because traditional IP regimes were never designed with the new digital space, or informational privacy policy objectives in mind. It will also be interesting to see if privacy can have multi-dimensional outlooks for protection – for instance, a person’s right to privacy can be protected both under a civil law regime, and under an IP framework. In case of infringement, a person may choose between the two available legal routes, that is, under IP law, or under civil law, depending on a person’s interest in her information.

Therefore, the future constructs of the privacy debate, particularly within the legal framework, will require a more complex and multi-dimensional perspective on the nature of a user’s or business’ interest in their data, recognising that there may be multiple interests to such data.<sup>121</sup> Further, it will become increasingly important to realize that, traditional concepts of information privacy, and in particular, traditional understandings of what is appropriate and inappropriate usage of personal information, are evolving over time.<sup>122</sup> The debates of the future will have to deliberate over the ways in which IP and privacy can be protected together. For instance, there can be two ways of protecting informational privacy and IP rights together – one, through contracts and licenses; and another, through a holistic legislation/regulation that can adequately govern both IP and privacy concerns, taking into account licensing regimes that operate in an evolving digital cultural space.

*c. Since both IP and privacy control access to content and information, local cultural contexts will have to determine how privacy and IP frameworks evolve in India.*

The evolution of privacy and IP debates in India must take into account the local contexts. This is important because there might be an entrenchment of accepted Western global privacy norms over local, Indian conceptions of privacy. The adoption of global standards without taking into account local contexts and challenges impacts the digital privacy debates and the evolution of IP systems in the country.<sup>123</sup> It is worthwhile to note that the global scholarship on the intersection of IP and privacy is still nascent. However, there are arguments that find merit in applying to IP laws, the three

commonly accepted theories of privacy — on control,<sup>124</sup> limited access,<sup>125</sup> and contextual integrity.<sup>126</sup>

Since both IP and privacy laws aim to regulate the flow of information – their context, control, and access – IP frameworks can draw lessons from informational privacy, and conversely, informational privacy frameworks can learn from IP.<sup>127</sup> It will be interesting to see how future debates over privacy and IP in India shape up, and whether the two legal systems governing them will be able to learn from each other.

*d. Data protection laws may not sufficiently account for normative and business model exigencies related to the growth of digital culture in India.*

The impact of evolving technologies like AI on privacy, ethics, and values of the digital cultural space largely arise due to their reliance on data. Typically, all of such evolving technologies place their reliance on unverifiable inferences and predictions about the behaviours, preferences, and private lives of users. While big-data analytics has advanced operational efficiency for businesses, it has also created new opportunities for discriminatory, biased, and invasive decision-making. Consider, for instance, AI being used in recruitment programs, and reflecting real world biases against women.<sup>128</sup> Therefore, stakeholders may need to question the ways in which data protection debates are being framed in India, and whether the country needs a new data protection regime for the digital cultural world. This will be particularly relevant in a world where predictive algorithms are enabled to draw both ‘low risk’ and ‘high risk inferences’ about individuals.<sup>129</sup> It will also be instructive to bear in mind that there are significant benefits to the processing of data, including the development of predictive models by businesses to better serve

customers, enhance capabilities to prevent fraud, improve efficiency, reduce costs, and provide constant customer service.<sup>130</sup> However, to be able to use algorithm-based predictive models more efficiently, and to detect, reduce, or eliminate existing discrimination, legal systems will have to evolve to include principles of transparency and auditability, fair and non-discriminatory choice of data, and reasonable algorithmic objective.<sup>131</sup>

Further, with the strengthening of privacy rights across the world, like the implementation and evolution of the General Data Protection Regulation in Europe, there will be challenges that will arise with respect to existing legal frameworks like those governing IP. For instance, a person’s right to access data, and the right of data portability from one company to another may conflict with, and have serious implications on a company’s protected trade secret, as has been explained earlier. Enforcement of IP rights in cases of infringement done for products sold over the Internet may also become difficult with stricter data protection laws.<sup>132</sup> Thus, the



future of the privacy debate will be marked by the challenges of the interactions between privacy and IoT devices, and their capacities

to collect, share, store, and operate vast quantities of personal data,<sup>133</sup> and also with other existing legal frameworks like that of IP.



## v. Future of Work in the Context of Augmented Intelligence

India is poised to have the largest workforce in the world over the next few decades, and this demographic forms a majority of the country's population. At the same time, the country's workforce is primarily comprised of those in the informal and unorganised sectors, and there are widespread issues with access to education,

social services, and infrastructure. Technological advances are now set to replace or supplant a majority of mechanical work over the coming decades, and this confluence of factors poses significant challenges for the labour market and the future of work in India, including in the digital cultural and creative industries.

*a. A majority of India's workforce is a part of the unorganised sector, and changes brought in by emerging technologies could entrench existing inequities.*

Most of India's workforce forms a part of the unorganised sector.<sup>134</sup> This often means a lack of social protection, decent and safe working conditions and wages, and access to finance.<sup>135</sup> It is also an indication of low levels of education, and poverty is often both a cause and a consequence of informality.<sup>136</sup> The issue of quality of employment is not just an Indian but a global one, with "decent work"<sup>137</sup> forming a part of the 2030 Sustainable Development Goals. Emerging technologies that enable automation could over the course of the next few decades, contribute to an increase in the size of the unorganised sector and entrench existing inequities.<sup>138</sup>

Some Indian technology platforms like UrbanClap which serve as aggregators for service jobs may provide part of the answer.<sup>139</sup> They provide basic skill training, match service providers with customers, provide a source of income, and offer a way for those in the informal or unorganised sectors to transition to the semi-formal or organised sectors. While this is a promising

start, such a model may not be very easy to replicate in creative industries where the final value of products and services is uncertain. Nevertheless, platforms (such as Freelancer and Upwork) that connect creatives with those seeking artists, designers, writers, etc. already exist, and creators and clients can negotiate and mutually agree on prices for tasks. Finding ways for creators from the informal sector to effectively make use of such platforms may aid this transition as well.

Some larger questions in this area that will have to be addressed are: what the prevalent culture of informality means for the future of work and commercial competitiveness in India, what sort of institutional structures need to be built to enable the majority of the workforce to contribute to and benefit from future technologies, and the changes in the nature of employment that such technologies will catalyse.

*b. Emerging technologies can both help and adversely impact women and other socially marginalised groups.*

Emerging technologies are likely to have a significant impact on women and those from socially disadvantaged groups. For example, automation is likely to adversely impact a higher percentage of women than men, because they are more likely to work in positions involving the performance of more routine tasks, which are more susceptible to automation.<sup>140</sup> This is exacerbated by the historical and persistent gender gap that exists in IP generation and protection,<sup>141</sup> the gender and other social biases in AI,<sup>142</sup> and the digital gender divide in India.<sup>143</sup> However, there is also evidence to the contrary. For instance, some technological tools can help improve transparency in human resource practices.<sup>144</sup>

Similarly, platforms that aggregate service providers as discussed above also could provide a viable way for some women and other socially disadvantaged groups to participate in the workforce.<sup>145</sup> A key issue for policymakers will be to assess how to effectively harness technology to benefit other socially disadvantaged groups in the informal and unorganised sector, and create viable forms of employment; and mitigate existing inequities. Studies conducted in other countries, such as one that charts the demographics of innovators and analyses trends in innovation<sup>146</sup> could prove instructional and provide areas to focus on in this context.

*c. Machine learning and AI technologies are likely to, over the coming decades, replace or supplement routine and manual roles – not necessarily excluding the cultural and creative industries.*

The increased use and improving accuracy and efficiency of machine learning and AI mean that some kinds of job roles, especially those which are routine and manual, can be easily performed through technology.<sup>147</sup> While it is unlikely that humans will be fully replaced in such jobs in the short-term, new technologies are nonetheless likely to augment human work, improving efficiency and also potentially reducing the number of persons that need to be employed (while also possibly creating new roles).<sup>148</sup> While "creative" jobs were thought to be ones that could only be accomplished by humans, we have discovered that this is not necessarily the case.<sup>149</sup>

Some jobs in the digital cultural space such as those relating to innovation and idea-generation, and those requiring interpersonal emotional and social connections are less susceptible to automation.<sup>150</sup> This raises questions regarding the implications for future employment in cultural and creative industries in India, the aims of any new skill development policy and modification of existing schemes to account for these new technologies, the capacities (educational, infrastructural, and otherwise) that must be developed to address the anticipated changes in the workforce, and the focus of such capacity-building.

*d. Global technology standards are generally formulated by developed countries and do not necessarily take realities in developing countries into account, raising questions on ways for India to effectively influence such standards.*

Future digital products and services, such as AR and VR services for displaying video will require an infrastructural base in order to be delivered to consumers effectively. While global standards (for example, around 5G) are generally created by developed countries, they may not be suitable for developing countries such as India, which face certain challenges (such as continuous and uninterrupted access to electricity). India has in the case of 5G, however, sought to optimise it for Indian consumption, by attempting to influence the 5G standards and introducing a proposal that would provide coverage of signal at lower speeds.<sup>151</sup> This also represents the first time India has made IP inroads into telecom standards, which are dominated by American and European companies.<sup>152</sup> China's influence set to increase as well with Huawei investing

heavily in research on 5G technologies and patenting key technologies.<sup>153</sup>

Although the proposal was only included in the optional list of 5G standards, it has been made mandatory in India.<sup>154</sup> While this is a promising start, going forward, policymakers will need to explore other such ways in which India can influence international standards to address domestic concerns (perhaps by creating incentives for domestic developers and hardware manufacturers to create India-centric solutions to problems, which can be replicated in other developing countries), and promote investment in research and development activities, so that the country can contribute meaningfully to setting of global technical standards.



## vi. Changes in Regulatory Architecture

A key question for the future will be the effective, and continuous design and reassessment of the regulatory frameworks governing the digital cultural space. This is because the space is defined by both mainstream regulations governing various businesses, and other relevant laws surrounding issues

of IP, competition, and taxation, all framed with the express aim of facilitating artistic expression, content creation, and business growth. Therefore, the future of regulation and governance will have to be a judicious mix of all the following themes.

*a. The future of regulation for the digital cultural space will be marked by the rise of responsive regulation over prescriptive regulation, to allow for the law to take into account technological advancements.*

Anticipatory and responsive regulation will gain particular relevance in a world where the boundaries between the traditional and the online world are being redrawn. Notably, Ofcom, the UK's convergence regulator, recommends the use of certain high-level principles to apply to online regulation, drawing from its experience of regulating standards on broadcast and on-demand media. These principles include

protection and assurance against harmful content, upholding freedom of expression while balancing wider public protection, adopting adaptable and principles-based regulation, transparent regulatory rules, appropriate powers of enforcement, and independent governance to gain credibility and public trust.<sup>155</sup> It will be interesting to see if similar principles can be developed for India, to tackle the challenges of the digital cultural era.

One such way of institutionalising and making regulations more credible in the long run, has been by the use of regulatory sandboxes. To promote innovation in finance for instance, regulatory sandboxes have been used in the UK by the Financial Conduct Authority in 2016 (by using robo-advice service and savings tools based on consumer data), Ofgem<sup>156</sup> in 2017, and Catalonia, which provided sandbox facilities for autonomous vehicles, linking car manufacturers, industry representatives, telecommunication companies, academia and legislators.<sup>157</sup> However, it must be noted that the use of regulatory sandboxes is a new strategy that is being explored by governments around

the world for emergent technologies, and therefore India should carefully consider the trade-offs involved.

Another way in which anticipatory regulation will be made responsive to evolving technologies and cultures, will be to institutionalise a review of legislations and processes governing this space in India. For instance, in the US, the Digital Millennium Copyright Act stipulated that the Library of Congress revisit the list of exceptions every three years to account for changing technologies and emergent needs.<sup>158</sup> Legislative reviews should become a key feature of future regulations in India.

*b. There will be challenges in the interactions between ecosystem-wide and niche sectoral regulations and regulatory approaches that will not be easily resolved.*

Regulatory architecture for the future digital cultural space may have to go beyond niche sectors, because technology companies have already started doing so. For governance to keep pace with the rapid evolution of the digital cultural space, regulations will also have to support innovations, businesses, and individuals right from the conception of an idea, to the development of the digital product into a scalable model. Examples of technologies and companies that are going beyond their traditional avatar include Facebook buying broadcasting rights to football in India, and WhatsApp foraying into the payments ecosystem. Thus, the lines between communication, broadcasting, content creation, and consumption are blurring, hinting at the fact that regulation in the future will have to go beyond isolated sectors.

the regulatory framework spans a number of sectors, including IP, taxation, digitisation of out-of-commerce works, a digital agenda for Europe, SME policies, and general support to the cultural sector. This was first done in 2014, when the EC launched a consolidated framework programme called 'Creative Europe', in support of Europe's cultural and creative sectors, effectively merging EU's 'culture' and 'media' programmes. The EC's Strategic Framework didn't just allow for regulation to undertake a common understanding of inter-linked and dependent markets, but also for developing expertise over the development of co-operative regulations, promoting greater sustainability of the regulatory frameworks, cohesion, and supporting an ecosystem with all forms of stakeholders and content.

The EC's Agenda/Strategic Framework<sup>159</sup> for culture is an interesting example, because

*c. The future of regulation and governance will look to evolving norms of co-regulation, jointly developed by different stakeholders in the digital cultural ecosystem*

Co-regulation would mean a combined effort by all stakeholders to craft policies with common values and incentives, combining the best-practices known to all. For example, the current regulatory trend recommended for online content moderation has been for regulatory agencies to provide a means for platforms to share best practices in content moderation without raising antitrust concerns. Outside experts could also be enlisted to develop best practices in consultation with industry representatives.<sup>160</sup> Co-regulation in this context could also go

beyond the Government, wherein businesses develop standards of regulation with the user community. For instance, the current workshops being organised around the world by Facebook<sup>161</sup> in relation to the establishment of better content moderation standards through an ‘Oversight Board’ is reflective of the developing norms around co-regulation. Therefore, the future of regulation will potentially look to evolving norms of co-regulation, jointly developed by different stakeholders.

*d. Self-regulation by stakeholders of the digital cultural ecosystem will form a key part of regulatory governance, and may also include Government recognition to encourage accountability.*

Self-regulation will form a key part of future regulation and governance. Self-regulation assumes common standards by which stakeholders of an ecosystem can be held accountable, with the burden of setting standards falling on governments. Therefore, an important set of goals for this purpose, whether achieved through public or self-regulation will be to lower transaction costs for implementing governance, provide a principled structure to facilitate negotiations, and establish some measure of predictability and reliability as to the rules governing commercial relationships in this market.<sup>162</sup> However, there are risks to self-regulation as well, for instance, the rising concerns over over-reliance on digital platforms like YouTube, to preserve the digital memory of the Syrian war. This resulted from YouTube adopting a new algorithm to flag and automatically remove Jihadi content, inadvertently deleting thousands of videos of legitimate content, and putting at risk, the entire digital history of the Syrian war.<sup>163</sup> Therefore, a key question for the future will be over how much self-regulation will safely co-exist with other governance mechanisms.

Importantly, self-regulation can also lead to effective co-regulation, in cases where the Government gives due recognition to self-regulatory standards crafted by stakeholders. For instance, the Advertising Standard Council of India’s (ASCI) self-regulation was upheld by the Supreme Court in 2017.<sup>164</sup> The Court observed that self-regulatory bodies including the Broadcasting Content Complaints Council and ASCI have been monitoring a number of private television channels for violation of the advertising Codes, and that they served as an effective pre-emptive step to statutory provisions in the sphere of media regulation for television and radio programmes in India. Self-regulation being affirmed by the Government may also provide a useful mechanism to prevent frivolous litigation in many cases, since self-regulation frequently provides for alternate methods of dispute resolution.<sup>165</sup>

## 6. Conclusion - The Path Ahead

This paper has been an attempt to present a broad conceptual framework of the series on ‘Contemporary Culture and IP’, and highlight some of the most relevant macro perspectives and trends for the future of the digital cultural space in India. For this purpose, we have identified the key stakeholders relevant to the debate, and reasoned why understanding their different incentives, and establishing a common and shared idea of the future will be critical to the growth of the digital cultural space in India. This is because we believe that for India’s sustainable and equitable future in the digital cultural space, it will become imperative for new policy constructs to take into account the shared visions of the Government, businesses, and people. Further, it will also require new scholarship to find novel ways of thinking about:

- (a) the complex feedback loops generated by the interaction between technologies, markets and societies;
- (b) frameworks of incentives and values, both in laws and business models; and
- (c) envisioning a future that enhances the role of balanced legal and economic frameworks.

Some of the broad themes and mega trends discussed in this monograph are:

- (a) the evolutions in digital consumption patterns in India, and its impact on content supply chains; the changing interactions between traditional and new media; and the opportunities and challenges in new modes of digital advertising and evolution of digital infrastructure;
- (b) the challenges and opportunities of both specialisation and scale in the context of new business models for content;
- (c) the applicability of existing IP laws to emerging digital technologies, and the impact of an evolving digital cultural space on such technologies;
- (d) the nuances of future debates on privacy and IP, the possible evolution of privacy into an IP, and the associated impacts on a rapidly changing digital cultural space;
- (e) the future of work in India, and the impact of digital technology on the content ecosystem; the role of infrastructure and policy in capacity-building; and
- (f) the evolution of regulatory architectures in the future, and discussions on the various methods of governance in the digital cultural space.

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