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Mapping innovation in India's creative industries: an ecosystem framework

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ABSTRACT

This paper reports on an ongoing research study funded by UKRI to map India's creative industries. Using an ecosystem framework, it has focused on strategy/policy; tangible and intangible infrastructure; funding and investment to understand innovation drivers and barriers across nine sub-sector value chains. The research established there is no one creative industries policy. Responsibility is split across 16 government ministries and 28 states. Much of India's economy is informal, with limited data on policy effects. Nevertheless, four important policies are shaping the creative industries landscape, supplemented by investment from global brands into textiles, media and advertising. These are driving innovation and design for social and ecological sustainability. At the time of writing the study is undertaking deep dives into CreaTec, Design for sustainability in fashion and textiles, and emerging geographic concentrations. It has identified a distinctive focus on how supply chains might inform UK circular fashion and media production policy.

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Creative industries; India; innovation; collaboration; ecosystem

Introduction

Bollywood, handicrafts, visual effects ... creative industries play a significant role in the Indian economy and its social development. A new Loughborough University-led project researched growth and innovation in the Indian creative industries in a bid to find areas for collaborative partnerships between UK and Indian businesses and researchers. Funded by UK Research and Innovation (UKRI), the authors report there are no competing interests to declare.

This policy review reflects on the first stage of the six-month research project taken in collaboration with Glasgow, O.P. Jindal and Shiv Nadar universities. The complete study aimed to map the creative industries overall. As the first attempt to map the Indian creative industries in the academic space, and to look in detail at the ecosystems of key sub-sectors and clusters, the initial scoping reported on here started by classifying the creative industries using the UK's policy framing of creative industry subsectors as

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- Advertising and marketing
- Architecture
- Crafts
- Design and fashion
- Film and TV, video, radio and photography
- IT, software and computer services
- Museums, galleries and libraries
- Music, performing and visual arts
- Publishing.

These sectors were first defined in 2001 in the Creative Industries Mapping Document as “those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property” and segmented to allow for statistics to be collected according to international industrial codes (DCMS, 2018, p. 9).

The Mapping study followed Neelands et al. (2015) in taking the interconnectedness of the cultural and creative sectors into account and de Bernard et al. (2021) in defining a wide range of governance bodies as central in thinking about how the sectors innovate and develop. For that reason, one of the initial tasks undertaken was to identify the relevant policy structures and activities at the national and state levels in India in order to understand their potential impacts on the creative industries across the country. Although the findings of this paper are drawn from the initial phase only, it is important to note that while both national and state governments have responsibility for culture and creative industries, policy is not coordinated through one department as through the UK’s Department for Digital, Culture, Media and Sport. Indeed, our initial mapping found little official government recognition of creative industries or a developed creative industry and/or cultural policy. Responsibilities were spread over 16 different Union ministries and 28 state governments and, consequently, policy initiatives were fragmentary. In thinking about this complexity, the study started by adapting Barker and Jordan’s (2022) framework of six core cultural ecosystem elements – strategy/policy; tangible and intangible infrastructure; funding/investment; education; communities; and creative content creators. For reasons of time and capacity the research focused on the first three of these, but with an awareness of the importance of the cultural traditions inherent in education, community and content. The second part of the study, which fell after the deadline for this policy review, took the form of three deep dives in which we attempted to navigate that complexity in order to recommend more holistic policy approaches to support UK-India creative industries collaboration. Our conclusions reflect on the usefulness of the ecosystem model and the UK’s creative industries taxonomy, and the potential of other framings for delving deeper into Indian creative industries and the policies that influence them.¹

Indian context

India is a country of some 1.4 billion people with a median age of 28.4 (United Nations, 2019). Although its economy has been hit by the Covid-19 pandemic, it is projected to grow by 6.4% in 2022 (United Nations, 2022). Its youthful population provides a sizeable

base for cultural consumption and innovation. The liberalisation of Indian fashion, retail, media and advertising since the 1990s (Athique, 2012; Begum et al., 2018) includes an increased focus on social mobility and the acquisition of social status through the consumption of material goods in fashion blogs, beauty magazines and retail advertising (Mazarella, 2006). There is also a sizeable diaspora – with, for example, 1.4 m Indians resident in the UK, making them the single largest visible ethnic minority population in the country. The diaspora, and the shared cultural understandings (intangible infrastructure) it helps to maintain, is hugely important to strategies to promote collaborations between the UK and India.

However, as a result of India's historical context and the highly situated nature of cultural production, it quickly became clear that, as O'Connor and Gu (2020) have argued in relation to China, there was no simple process in transferring the sectoral definitions created for the industrialised and professionalised sectors in the West. Cultural differences are magnified by distinctive business practices in an economy that has jumped from agrarian to globalised service economy with aspirations to join the innovation/knowledge economy power houses in just a few decades. The rapidity of the change has left the country with a highly unequal society and a large informal and under-understood economy. Economic development policies, while seeking to grow exports and internal markets, are underpinned by a desire to promote "the equity of Indian industry through the development and commercialization of indigenous technology and by adapting imported technology for domestic applications" (Dutta et al., 2020 p. ix). According to the International Labour Organization the informal economy "accounts for more than 80 per cent of non-agricultural employment" (ILO, n.d.) including many working in artisanal and cultural traditions in textiles and handicrafts and festivals. Incomes in these sectors are limited, often seasonal and insecure, and the infrastructure to connect these skills into contemporary innovation and, specifically content and brand creation, inadequate. There are suggestions this is changing – in a way which could transform some key sub-sectors. Some weavers and pattern cutters working in well-established sectors such as crafts and textile design, for example, are accessing computer aided design programmes on their mobiles, innovating across the supply chain by linking these to mills that can do small – affordable – runs of fabrics and garments, and then selling on e-commerce platforms enables direct selling to customers. However, there is also evidence that the formal sector outsources production to the informal economy to alleviate peaks in demand from global brands. Subcontractors, usually micro-businesses and independent producers (ILO, n.d.) drawing on the skills developed in traditional handicrafts such as embroidery, often remain off the formal books with few labour rights, leading to gaps in the data on employment, and concerns about the sustainability of traditional craft production.

Strategy/policy

The Government of India (GoI) does not have one creative industries or creative economy policy, with responsibilities spread over 16 different ministries and 28 state governments. Nationally our research has found four policies are having important impacts on creative industry innovation: Digital India,² Atal Innovation Mission³ and Start-Up India⁴ and Make in India.⁵ Cutting through these in an emerging policy on working toward the UN Sustainable Development Goals by 2030 (Government of India, 2019).

Centrally, the formal economy industrial element is led from the Prime Minister's office and Finance Ministry with key ministries such as Textiles, Information and Broadcasting and the Micro, Small and Medium Enterprise (MSME) ministries overseeing roll out. The developmental interventions relating to the – mainly rural – informal economy are more widespread, with the Ministry of Culture taking a role through seven Zonal Cultural centres, which promote regional cultural heritage and aim to provide sustainable livelihoods for rural artisans (Ministry of Culture, 2022), alongside the Ministries for Tribal Affairs, Skills and Education.

There are four cross-cutting policies which are influencing growth and innovation.

Make in India is a cross cutting policy aimed at improving “ease of doing business” in India. It includes investment in new infrastructure such as industrial clusters and better logistics. The annual budget for the policy in 2020–2021 was INR 1.28bn. It targets 25 sectors, including textiles, leather, media and entertainment. Although it is primarily focused on manufacturing, importantly for innovation in the creative industries more generally, it includes a focus on supporting research activities by improving IP registration processes, up-grading technologies and digital infrastructure. In relation to the creative industries, Make in India has promoted the development of Mega Textile Parks to support artisanal producers to be more entrepreneurial; and has focused attention on the growth potential of animation, gaming and visual effects (VFX) production.

Launched in 2016 the **Atal Innovation Mission** (AIM) is a Gol initiative to promote innovation and entrepreneurship (NITI Aayog, 2020). The policy launched programmes ranging from Tinkering Labs in schools to Community Innovation Centres in underserved cities, rural and tribal areas, mentoring schemes to partner MSMEs and entrepreneurs with advisors from industry, academia and NGOs. With innovation widely defined, the Mission has been inclusive of creative industry sectors. Zootopia-2021, for example, asked design and architecture students to work with zoo managers to rethink and transform the zoo experience for animals and visitors.

Influential policies also include **Digital India** and the recently announced **AVGC** – animation, VFX, gaming and comics – task force that builds on the Make in India insights, and policies developed by State governments, starting with Karnataka in 2012.

According to the India Brand Equity Foundation (IBEF) India has some 63 million MSMEs in 2021. Of these 68% are keen to use digital technologies to introduce new products and services and to undertake branding. Hurdles found included digital skills gaps, and investment and data analysis skills gaps. Covid-19 accelerated digitisation as it did in other countries (IBEF, 2021). Opportunities identified in Digital India relate to e-commerce and digital payments, and direct selling for micro-businesses. Launched in 2019, Digital India is one of the Gol's flagship programmes. It aims to “transform India into a digitally empowered society and knowledge economy” (Ministry of Electronics and IT, Government of India, 2019).

Growing out of the earlier e-Governance project, Digital India has three goals:

- Supplying digital infrastructure for all citizens
- Integrating governmental systems across departments and jurisdictions and making them available online and on mobile platforms.
- Universal digital literacy and accessibility of resources and services.

From our research to date, it is evident that digital innovation is highly integrated into all of India's creative industries, from mobile CAD applications making digital textile design available to rural artisans, to immersive gaming. In April 2022 the Ministry of Information and Broadcasting announced it was setting up an animation, VFX, gaming and comics (AVGC) task force to frame a new national policy, recommend a higher education curriculum, boost employment and promote the sector globally with an eye to attracting foreign direct investments (Rekhi, 2022). This builds on the policies developed by state governments in Karnataka (2012), Maharashtra (2015) and Telegana (2021). Karnataka, and particularly Bengaluru, is the country's IT capital. Maharashtra, and Telegana are by contrast film and media clusters benefiting from digital convergence in production and distribution. Just as CreaTech has emerged as a focal point for policy focus and investment in the UK (Mateos-Garcia, 2021), so in India the convergence of real time technologies in screen and games is seen to have the potential to become a flagship sector within the GoI's Make in India and Brand India policies.

Start-Up India is the fourth key policy initiative. The Start-Up India action plan was launched in 2016 and is led by the MSME. It is intended to promote the development of formal small businesses. It includes 19 actions aimed at making entrepreneurship easier by providing tax incentives and credit guarantees, reducing some of the bureaucracy associated with IP registrations and compliance and supporting incubation partnerships between academia and industry. In the creative industries, these policies are driving the development of textile parks and craft clusters across the country.

Individual states also have similar policies to attract growth within the creative industries. To give one recent example, the Delhi Government's film policy, launched in May 2022, promises a single-window system to provide clearances for film shootings within 15 days, plus subsidies and international film festivals. It is part of the government's budget push to generate two million jobs in five years by developing a skilled ecosystem for media production, but also has a soft power component of global city branding ([Government of Delhi](#)).

For the traditionally informal sectors, Start-Up India and Digital India programmes supply mechanisms for moving into the formal economy by making access to new technologies and markets more affordable, and teaching entrepreneurship skills. For those already working in the formalised economy, clustering, partnerships and trade promotions, combined with e-government aim to reduce barriers to innovation and growth.

All of these policies are relatively new in economic development terms, and it is not yet clear what impact they are having on different parts of the Indian economy. Further research and monitoring are needed to evaluate the effectiveness of these different measures in relation to the creative industries. In the absence of a creative industries policy situated within one government ministry, while some data are available, there is not one easily accessible source on employment, GVA or exports across the sub-sectors.

Tangible and intangible infrastructure

Infrastructure which influences innovation and growth in the creative economy includes formal bodies such as governmental and governance agencies, firms and NGOs, trade bodies and networks and educational institutions that inculcate professional norms. It also includes informal social structures such as the professional expectations inculcated

in art and design education (Bull, 2019), traditions, tastes and values. These informal structures, normalised within the culture, underpin decisions made within the formal institutions, influencing which sectors are included in consideration for funding or investment (Jordan, 2023).

In India's case the formal structures include:

The Government of India

As set out above, responsibility for the Indian creative industries is spread out across 16 different ministries of the central government. These include – amongst others – the Prime Minister's Office, the Ministries of Culture, Textiles, Education, Information and Broadcasting, Finance, Development and Entrepreneurship, Micro, Small and Medium Enterprises (MSME), Communication, Youth Affairs and Sports, Minority Affairs, Tribal Affairs, Tourism, Housing and Urban Affairs. These ministries are further subdivided into Corporations, Institutes, Missions and Boards.

The central government has also set up seven overlapping zonal cultural centres since 1985 with the sole mission to "strengthen the ancient roots of Indian culture and evolve and enrich composite national culture". Several states have zonal membership in more than one zonal centre. Whilst the prime focus has been to grow awareness of heritage, these zones have promoted various creative disciplines such as theatre, music, drama, crafts – improving opportunities for various creative practitioners and at the same time also fostering more public participation.

Educational institutions such as the National Institutes of Design and the National Institute of Fashion and Textiles are also highly influential both formally, in that they were set up as part of governmental policies and have explicit roles in promoting their sectors, and informally as bodies that reproduce professional cultures (Bull, 2019).

States

Due to the federal nature of India, states are relatively autonomous and have their own ministries and structures. As an example, in West Bengal the Science and Technology, Backward Classes Welfare, Finance, Higher Education, Information Technology and Electronics, Industry Commerce and Enterprises, Mass Education Extension and Library Services, Micro Small and Medium Enterprises and Textiles, Tourism, Tribal Development, Youth Services and Sports, Information and Cultural Affairs ministries all have some level of involvement in the broad creative sectors.

In recent years some states have taken the lead in creative industry cluster development. Karnataka became the first state to launch the AVGC Centre of Excellence in Bangalore, for example, with the goal of building domestic capacity to service the growing demand within this sector. This is a central and state government partnership sitting within the Information and Broadcasting Ministry.

Each of the sub-sectors studied also has trade and membership bodies undertaking research and policy lobbying and these are varied in their influence. One prominent body is the Federation of Indian Chambers of Commerce & Industry (FICCI). In addition to providing practical services for its members, FICCI claims to be "Industry's voice for policy change" and in this role it undertakes policy research and consultation with

policymakers, and industry leaders, civil servants and academics. A sample of recent studies it has undertaken in the creative industries show the variety of its interest Economic Impact of Online Curated Content services in India (FICCI, 2021a); sustainability (FICCI, 2021b); toys and games (FICCI, 2021c).

Intangible infrastructure

Soft institutions are more difficult to identify, particularly in the context of India's large informal economy and this is an area which is worthy of more research. Place-based traditional skills appear to provide employment and sustainable production practices. Initial findings have pointed to the importance of India's incorporation of handicrafts within the Geographical Indication of Goods Act 1999 as part of its obligations under the WTO's Trade-Related Intellectual Property Rights (TRIPS) agreement. This gives protections to handicrafts with a "given quality, reputation or other characteristics ... essentially attributable to [their] geographical origin" (Government of India, 1999, p. 4) whether or not the producers have other IP protections such as trademarks.

There remain large gaps in knowledge about – and therefore policy to support people working within – the informal handicraft economy, however. The International Labour Organization (ILO, n.d.) estimates the informal economy accounts for "more than 80 per cent of non-agricultural employment". As Gill and Pratt (2008) argued, this kind of informal and largely precarious work relies on a social infrastructure, "the social factory", being available to support artisans between commercial cultural employment. Finding policies to balance growth – to increase both the numbers of people employed in the handicraft economy, and the value they receive for their work – is essential to ensuring traditional skills persist. To ensure policies are fit-for-purpose, first research is needed to establish methods for collecting robust data on the numbers of workers, domestic sales and exports, and where in the supply chain value is being extracted.

Funding/investment

In 2020 The World Intellectual Property Organization (WIPO) highlighted India's rise to 48th in the Global Innovation Index. They acknowledged the range of interventions being developed and praised a drive towards an innovation ecosystem with soft loans and tax breaks, combined with innovation support, research partnerships, hard and virtual infrastructure. But they asked: "who will finance innovation?" (Dutta et al., 2020, p. vii).

The infrastructure and policies above form the basis for a public-private partnership "enabling environment" (Dutta et al., 2020, p. ix) for innovation supported by direct and indirect financial incentives for research and development, and start-up incubation. The Small Industries Development Bank of India (SIDBI) manages the India Innovation Fund, a venture capital scheme, for example.

Private sector investment is also evident across the established creative industries. Indian textile firms have invested in digital technologies to reduce waste, undertake recycling and using data to improve the supply chain. Media and gaming, already highly innovative growth sectors, have benefited from the behavioural changes caused by the pandemic. Investments in digital content have reduced production, reproduction and

distribution costs, with global streaming platforms investing in new content, VFX and online gaming. This growth has been noted by several State Governments. Maharashtra has supplied tax exemptions for the animation, VFX and gaming sectors since 2015. Telangana has invested INR 12 billion (£124 million) to support employment in the sector. The state claims to have 150 companies working in VFX employing 30,000 people (Invest Telangana, n.d.) Karnataka which launched a digital media hub in January 2022 to substantiate its claims to be a centre of excellence in creative industries.

It should also be noted that in recent years (and exacerbated through COVID lockdowns) there has been a huge growth of OTT (Over the Top media service) platforms and streaming services in India. Whilst Netflix and Amazon Prime are important players, they are by no means the largest or most important. Homegrown platforms such as Hotstar and Sony Liv each boast up to 45 million users each. There are more than 40 providers of such OTT platforms in India in a variety of Indian languages with a recent report by KPMG predicting platform users in India to increase to 62 million in the next year. Increasing investment in this sector is catalysing the production of homegrown content, as well as providing tie ups with mobile service providers for cheap steaming tariffs. In employment and financial terms, however, local production is relatively small compared to the VFX and animation services which global film studios outsource to India.

Emerging findings

The absence of a single creative industries policy, combined with India's distinctive economic structures meant that the UK's categorisation did not fit easily as an analytical framework. The UK taxonomy includes fashion within design, for example, but not textiles. This made it difficult to make direct comparisons between India and the UK. However, it also illuminated some areas ripe for re-evaluation and this was the focus of two of the deep dives. Circular fashion concepts, for example, draw attention to the need to redesign processes throughout the supply chain, including business models (e.g. Mishra et al., 2021). And India's AVGC policy, which crosses the boundaries between film and TV, software and IT, and publishing, illustrates the effects of technological convergence on media production. The inclusions of "comics" also points to the significance of cultural traditions underpinning content creation, with policy effects ranging from cultural support schemes to IP protection. These are issues which are likely to be significant challenges for policy makers working within established frameworks.

Work undertaken to date in this study shows that the creative industries in India are both innovating and growing in response to domestic policies and demographics and to international markets. Digital India, combined with a young population, a growing educational system and technological convergence, is providing opportunities across all sectors, with those that are globally connected – advertising, media and entertainment and fashion/textiles all benefiting from private sector investment in digital technologies. There is some evidence India's strengths in IT and post-production are having spillover effects into digital advertising, with these sectors growing in cities away from the traditional centres in Mumbai and Delhi to cities such as Bengaluru, Hyderabad and Chennai (Rafiqul, 2021).

Alongside this global market, there is an informal market of artisans and MSMEs working in traditional fabrics, performing arts and handicrafts across the country. Here

there is also evidence that digital access is enabling innovation. Examples include the use of 3D avatars to reduce sampling times in the textile industry, and Karigar, Amazon's online marketplace for independent traditional crafts. But this sector of the economy is poorly recorded in official statistics, meaning policies either ignore it, or are not appropriate for the scale of operations.

The second phase of this study looked in more depth at three thematic areas identified in Phase 1: design for sustainability in fashion/textiles/architecture; the impact of digital innovation and the emergence of "CreaTech" phenomenon and regional policies; and a closer look at the geographical spread of the creative sectors across the country to try and uncover if there are concentrations not yet large enough to show up on official statistics.

Conclusions to date

This research has so far just touched the surface, but it is evident that the creative industries across India are vibrant and full of potential. We identified strong growth in areas where it would be expected – CreaTech, for example – where India has a global reputation for animation and VFX. But it is also evident there is potential for other sectors, for example artisanal handicrafts such as traditional textiles where there is a large, but informal, economy. Although not captured by official statistics, there are indications this sector is embracing the potential of mobile digital to access computer aided design, and e-commerce platforms to enable direct selling.

Textile producers at the other end of the economy are also innovating. In response to the powerful international drive toward sustainability in fashion and fabrics, global brands are keen to promote their clothing as eco and social justice friendly. This push, however, is underpinned by complex regulations that demand traceability of supply leading to questions of whether independent craft-makers, who are likely offering highly sustainable wares, are aware of, or able to keep the kinds of records required? There is a need to undertake further research to study the barriers and opportunities that will enable independent crafts workers in this informal economy to access the market research necessary to respond to fast-changing global fashion trends and establish their own brand identities. What, if any, changes to policy or institutions would enable this?

Within CreaTech, while India has strengths in post-production, to date it has largely acted as a service provider to Western film and game production, rather than as a content producer. With the growth in streaming and podcasting, what is the potential for home-grown content, or international collaboration? Are there opportunities to learn from the success of other countries, such as South Korea's music and film industries?

While there is international research and collaborative work happening within the country's higher education sectors in technical textiles and sustainable production techniques, there is more to be done to develop links with the creative industries themselves; to facilitate knowledge transfer partnerships and student placements, both within Indian industry and through students studying abroad.

In terms of the ecosystem framing for this study, while the Government of India does not have a specific creative industries policy, Digital India, Start-Up India, Make in India and Atal Innovation mission provide a framework that appears at this stage to be supporting micro and small businesses across the sectors. State and city governments are varied

in their approaches and support, indicating that further research does need to be situated within geographical as much as sectoral contexts.

India's global connectedness is also worth noting. Commercial investment in sustainability is at least in part a response to policies in international markets. The EU's European Green Deal was identified by FICCI (2021b) as an important driver of change in textiles and electronics, for example.

There remain questions about the extent to which the informal economy is formalising, and what the opportunities are for sustainable growth that builds on the intangible infrastructures of artisanal expertise and cultural traditions. While there is significant commercial investment, this is focused on innovation and growth suitable for global brands and exports, such as VFX services and technical textiles, leaving a gap in funding for products and content that are culturally specific. In the absence of a coherent creative industries policy that collates data on the sector, there remains a need to find methodologies to undertake research into the working practices and supply chains in the informal creative industries to identify how and where they are innovating.

So how to conceptualise the questions facing India's creative industries, and particularly in relation to innovation and potential collaboration between the UK and the sub-continent?

The ecosystem framework has been helpful in drawing attention to the policies and infrastructures adjacent to but highly influential within the creative industries that are driving investment, such as Digital India and the development of design and CreaTech institutes. It has also illuminated questions about the intangible infrastructure such as the diaspora and how to first capture data on, and then support creatives within the informal economy. These questions were central to the three deep dives researched in the second part of the study.

In asking question about the informal economy, we had to address complex questions of social, cultural and environmental sustainability. Allied to the ecosystem model is the concept of the circular economy, defined by the [Ellen MacArthur Foundation](#) as "a systems solution framework that tackles global challenges like climate change, biodiversity loss, waste and pollution", and widely used in the fashion and textiles industry. However, it is not evident this approach accounts for social and cultural sustainability. For this reason, we have turned to the concept of the "social factory" (Gill & Pratt, 2008), a framing that looks at how precarious work outsources the costs of production to workers' families. Policymaking from this perspective would consider questions of value creation and ownership, and it is this that drew us to focus on "geographical indication" as an important policy within fashion and textiles in India.

And lastly, for now, is the question of how policies transfer from one context to another. We started the study framing the creative industries using the DCMS' categories. It quickly became apparent these did not fit the Indian context for three significant reasons. Firstly, the distinctions between amateur and professional. Individual and collective are less clearly defined in India than in the UK and artisanal crafts are often produced by villages or families rather than individual creators. They might be produced for cultural and religious reasons as much or even more than for commercial gain. This conflation has policy implications in relation to IP, for example, and schemes to support tangible and intangible culture. Secondly, in the UK the definition of fashion excluded textile and garment production, but these are the main activities in India where policy questions,

therefore, must include the whole supply chain. It also has implications in the UK where sustainability policies pushing for on or re-shoring of garment production will require reframing the existing taxonomy's boundaries between "fashion design" and "fashion supply chain". And, thirdly, there is the ever-present issue of the informal economy. While there are gaps in knowledge regarding freelancers in the UK, the co-ordinating power of the DCMS means this is on a very different scale to that in India. Policy research, then, must be sensitive to these contextual and infrastructural differences if recommendations are to be appropriate and practicable.

Notes

1. A summary of the research (Hitchen et al., 2022) has been published subsequent to this report's submission which provides more detail on the subsectors not selected for deep dives and a book reporting on the study in production.
2. <https://www.digitalindia.gov.in/content/vision-and-vision-areas>.
3. <https://www.aim.gov.in/overview.php>.
4. <https://www.startupindia.gov.in/>.
5. <https://www.makeinindia.com/>.

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References

- Athique, A. (2012). *Indian Media*. Polity.
- Barker, V., & Jordan, J. (2022). Finding the sweet spot: Critiquing a cultural ecosystems approach to civic cultural strategy making. *Journal of Cultural Economy*, 15(3), 277–292. <https://doi.org/10.1080/17530350.2022.2041464>
- Begum, L., Dasgupta, R. K., & Lewis, R. (2018). *Styling South Asian Youth Cultures: Fashion, Media and Society*. Bloomsbury.
- Bull, A. (2019). *Class, Control, and Classical Music*. Oxford University Press.
- de Bernard, M., Comunian, R., & Gross, J. (2021). Cultural and creative ecosystems: A review of theories and methods, towards a new research agenda. *Cultural Trends*. <https://doi.org/10.1080/09548963.2021.2004073>
- Department for Digital, Culture, Media and Sport (DCMS). (2018). *DCMS Sectors Economic Estimates 2018 (Provisional): Gross Value Added*. Retrieved May 31, 2022, from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/959053/DCMS_Sectors_Economic_Estimates_GVA_2018_V2.pdf

- Dutta, S., Lanvin, B., & Wunsch-Vincent, S. (Eds.). (2020). *Global Innovation Index 2020: Who Will Finance Innovation?* (13th ed.). WIPO/Cornell/INSEAD. Retrieved May 27, 2022, from https://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2020.pdf
- Ellen MacArthur Foundation. *What Is a Circular Economy?* <https://ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview>
- FICCI. (2021a). *Economic Impact of Online Curated Content Services in India*. Retrieved May 18, 2022, from <https://ficci.in/publication.asp?spid=23560>
- FICCI. (2021b). *Sustainable Consumption and Production*. Retrieved May 30, 2022, from https://ficci.in/spdocument/23532/Sustainable_Consumption_and_Production.pdf
- FICCI. (2021c). *Toys and Games*. Retrieved June 1, 2022, from <https://ficci.in/publication.asp?spid=23530>
- Gill, R., & Pratt, A. (2008). In the social factory? Immaterial labour, precariousness and cultural work. *Theory, Culture & Society*, 25(7–8), 1–30. <https://doi.org/10.1177/0263276408097794>
- Government of Delhi. (2022). *Ministry of Tourism. Delhi Film Policy 2022*. Retrieved June 9, 2022, from <https://delhitourism.gov.in/dttcd/efilm/docs/fp2022.pdf>
- Government of India. (1999). *The Geographical Indications of Goods (Registration and Protection Act, 1999)*. <https://legislative.gov.in/sites/default/files/A1999-48.pdf>
- Government of India Ministry of Finance. (2019, July 4). Indian follows holistic approach towards its 2013 sustainable development goals (SDGs). Retrieved May 23, 2022, from <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1577014#:~:text=The%20Survey%20cites%20current%20Government%20of%20India%20policies,Jyoti%20Yojana%20and%20Pradhan%20Mantri%20UjjwalaYojana%2C%20among%20others>
- Hitchen, G., Bhattacharjee, K., Chaudhuri, D., Dasgupta, R. K., Jordan, J., & Roychowdhury, A. (2022). *Creative Industries in India Mapping Study*. Retrieved April 26, 2022, from https://repository.lboro.ac.uk/articles/report/Creative_Industries_in_India_Mapping_Study/21907980. Accessed 26 April 2023
- IBEF. (2021). *Digital Adoption by Indian SMBs*. Retrieved April 16, 2022, from https://www.ibef.org/download/success_story_Digital_Adoption_by_Indian_SMBs.pdf
- Independent Labour Organization (ILO). (n.d.). *Informal Economy in South Asia*. Retrieved June 1, 2022, from <https://www.ilo.org/newdelhi/areasofwork/informal-economy/lang-en/index.htm#:~:text=Despite%20high%20levels%20of%20economic,informality%20in%20the%20formal%20sector>
- Invest Telegana. (n.d.). AVGC. Retrieved May 30, 2022, from <https://invest.telangana.gov.in/avgc/>
- Jordan, J. (2023). Cultural closure and social mobility: A critical examination of festival governance structures as exclusive social spaces. *Annals of Leisure Research*, 26(2), 207–229. <https://doi.org/10.1080/11745398.2021.1927768>
- Mateos-Garcia, J. (2021). *Creatch Activity in the UK*. Creative Industries Policy and Evidence Centre and Nesta. <https://pec.ac.uk/research-reports/creatch-activity-in-the-uk>
- Mazarella, W. (2006). *Shoveling Smoke: Advertising and Globalization in Contemporary India*. Duke University Press.
- Ministry of Culture, Government of India. (2022). *Zonal Cultural Centers*. Retrieved June 12, 2022, from <https://indiaculture.nic.in/about-us/autonomus-bodies/zonal-cultural-centers>
- Ministry of Electronics and IT, Government of India. (2019). *About Digital India*. Retrieved May 23, 2022, from <https://www.digitalindia.gov.in/content/about-digital-india>
- Mishra, S., Jain, S., & Malhotra, G. (2021). The anatomy of circular economy transition in the fashion industry. *Social Responsibility Journal*, 17(4), 524–542. <https://doi.org/10.1108/SRJ-06-2019-0216>
- Neelands, J., Belfiore, E., Firth, C., Hart, N., Perrin, L., Brock, S., Holdaway, D., & Woddis, J. (2015). *Enriching Britain: Culture, Creativity and Growth*. University of Warwick.
- NITI Aayog. (2020). *Atal Innovation Mission Overview*. Retrieved May 27, 2022, from <https://aim.gov.in/overview.php>
- O'Connor, J., & Gu, X. (2020). *Red creative: Culture and modernity in China*. Intellect.
- Rafiqul, S. K. (2021, August 8). *2021 Digital Marketing Statistics: Current State of Digital Marketing in India* <https://iamrafiquel.com/digital-marketing-statistics/>

- Rekhi, D. (2022, April 8). AVGC task force to submit first action plan within 90 days. *The Economic Times*. Retrieved May 20, 2022, from <https://economictimes.indiatimes.com/tech/tech-bytes/avgc-task-force-to-submit-first-action-plan-within-90-days/articleshow/90729810.cms>
- United Nations. (2019). *World Population Prospects*. Retrieved May 23, 2022, from <https://population.un.org/wpp/Download/Standard/Population/>
- United Nations. (2022, May 18). *World Economic Situation and Prospects (WESP) Mid-Year Update*. Retrieved May 23, 2022, from https://www.un.org/development/desa/dpad/document_gem/global-economic-monitoring-unit/world-economic-situation-and-prospects-wesp-report/world-economic-situation-and-prospects-wesp-mid-year-update