

# Digital Platforms and Craft Workers in the Time of Covid

Christine Ithurbide, Monish Khetrimayum

# ▶ To cite this version:

Christine Ithurbide, Monish Khetrimayum. Digital Platforms and Craft Workers in the Time of Covid. South Asia Multidisciplinary Academic Journal, In press. hal-03484170

# HAL Id: hal-03484170 https://hal.science/hal-03484170v1

Submitted on 16 Dec 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# **Digital Platforms and Craft Workers in the Time of Covid**

#### **Christine Ithurbide**

CNRS Research Fellow, Passages UMR 5319, Bordeaux

#### **Khetrimayum Monish Singh**

IFRIS Postdoctoral Researcher, Laboratoire Interdisciplinaire Sciences Innovations Sociétés (LISIS), Paris

#### **Abstract**

The COVID 19 lockdown situation has raised important socio-economic difficulties within the craft industry in India. This paper specifically proposes to discuss as to what extent the pandemic has strengthened the use of digital platforms and accelerated certain processes of reconfigurations within the craft industry. E-commerce platforms have been recently investing in this sector, from local entrepreneurs initiatives, governmental interventions to large e-commerce platforms (Amazon, Flipkart etc.). The attempt would be to examine the adaptation of work dynamics in a largely informal and precarious sector, the changes in terms of platform strategies, and the way in which the pandemic may have reinforced processes of dependency toward certain digital players. Based on the case of the craft industry in India's North-East region, this paper will rely on qualitative methodology associating document analysis and fieldwork conducted before the lockdown in February 2020 in Assam, and followed by online interviews conducted after several months of lockdown.

**Keywords** Digital platforms; craft industry; artisans; local entrepreneurs; Assam; COVID 19

#### Introduction

The COVID-19 lockdown in India has raised important difficulties for the craft industry<sup>1</sup>, a sector of activities that represents one of the largest employment category in the country and a high contribution to the export power of India (FICCI-EY 2016), while relying on socio-economic groups with low revenues and living primarily in rural areas. When the 21 days lockdown was announced mid-March 2020, most artisans had to shut their workshops because they could not apply social distancing norms, thus depriving themselves from working and earning their daily living. But most importantly, they were severely affected by the decisions from the Government to cancel all craft fairs and to forbid supply of non-essential goods by e-commerce companies during the subsequent periods of lockdown.

This paper proposes to discuss the immediate consequences of the lockdown on the craft workers and the social entrepreneurs working with them, and to explore a certain number of

Our definition of craft sector follows the ones from organizations such as the Craft Council of India and the Development Commissioner (Handicrafts), Govt. of India, or UNESCO frameworks. In short, "handicrafts are products or services provided by artisans, working primarily with their hands with minimal or limited inputs from machines [...] The distinctive nature of handicraft comes from the fact that these goods or services can be identified with certain traditions or geographies" (CCI, 2011).

ongoing transformations following this period and during the months of the COVID-19 crisis. Several articles and reports published during the last few months have highlighted the grave impact it had on the lives and livelihoods of craft workers (Das and Sutradhar 2020). Online conferences gathering both industry professionals and cultural experts in India, were also organized to discuss pressing questions and actions to be taken². This paper will focus on an aspect which has been less discussed despite rising important issues for the future of the craft industry and that concerns the emerging practices and articulations around the digital platforms economy. While e-commerce platforms have been recently investing in this sector, we propose to better understand to what extent the pandemic has strengthened the ongoing transitions to digital platforms in the craft sector, and which may have accelerated certain tendencies and processes of reorganization within artisans' work. As an ongoing research project, we will discuss the first results from our exploratory survey that also aims at drawing up avenues to be further explored.

The objective of this paper is to contribute to the understanding of the consequences of the pandemic situation for already vulnerable communities in India (Aldahdah et al. 2020; Bercegol et al. 2020). It also aims at providing some first elements to understand the way in which the pandemic has led to an increasing power of digital operators and a critical approach on the ongoing « platformization » of the craft sector.

# Digital Platforms and Socio-economic Transformation in Pre-Covid Time

The Covid lockdown has triggered a massive digitalisation movement both in the public and the private sphere. The role of an increasing number of online services that (re)shape our everyday life has been highlighted by the Covid lockdown: social media platforms to maintain contact in time of restrictions on mobility, new video services for work meetings (Zoom, Google Meet), well known e-commerce platforms for goods delivery and food delivery services (Zomato, Uber Eat, Swiggy); some of them known for relying on low wage digital workers and the gig economy (CIS 2019; Bhatia 2020). The injunction to move activities online has been particularly strong in the cultural industries (museums, performing arts, live music, cinema, etc.) as well as in the craft sector (OECD 2020; British Council, FICCI and Art X Company 2020). A clear assumption was that online sales would « rescue artisans in a big way, directly linking them to buyers » (Balasubramaniam 2020). While this particular context has been also presented as a « great opportunity to the testing of new technologies and forms of organisation » (Amorim and Teixeira 2020) especially in the cultural sector, a closer analysis needs to be done in order to evaluate the multi level transformations.

The hope placed into digital « solutions » when the Covid crisis occurred was actually building upon decades of promises associated with digital devices. Public institutions as well as private firms in technology have been carrying a discourse explaining that digital transformations would accelerate economic growth, facilitating social integration and empowerment. In India, the "Digital India" National programme plays an important role in the diffusion of this discourse.

<sup>2</sup> 

Some significant but non exhaustive list of initiatives include: UNESCO webinar Resliart, May 2020; « Crafting Routes: Helping women artisans and entrepreneurs explore business and marketability post Covid-19 » by Impulse NGO Network and Impulse Social Enterprises in collaboration with the British Council and Indian Institute of Entrepreneurship, May 2020; « Taking the Temperature » by British Council and Art X Company, July 2020; FICCI Conference « Recrafting & Tailoring Artisanal Practices for New Digital Economy », November 2020.

However, a critical body of literature from various disciplines (Gillespie 2010; Srnicek 2016; Athique et al. 2017; Athique and Parthasarathi 2020) has been bringing attention on a certain « ideological disenchantment » (Desage and Godard 2005) associated with digital technologies. Indeed, important gaps have been highlighted between the hopes they raised and the reality of the power conferred on citizens; and between their cost of implementation and the economic reality of the territories they were expected to operate within. The rhetoric on the « inevitable » change (Kumar 2020), as well as on the transparency, security, and efficiency justifying their implementation, has enabled large transnational telecommunications operators to take enormous financial benefits from this « digital transition » (Matterlart et al. 2015), « This period of social and political unrest has highlighted the immense power of large platforms to shape public debate» explains Griffin (2020a), and even beyond, to shape economy, and the circulation of information and culture.

Focusing more specifically on the articulation between digital platforms and cultural industries, a growing body of work has been analysing the deployment of platform operators reshaping local industries, the evolution of power relations between cultural industry and communication industry players, and the transformation in the nature of creative works (Casilli 2016; Casilli and Gutierrez 2019; Graham et al. 2017; Nieborg and Poell 2018; Hesmongdhal and Meyer 2018; Ithurbide and Rivron 2018; Bullich and Schmitt 2019; Mohan and Punathambekar 2019; Bouquillion et al. upcoming). Nieborg and Poell (2018) describe the platformization of cultural production "as the penetration of economic, governmental, and infrastructural extensions of digital platforms into the web and app ecosystems, fundamentally affecting the operations of the cultural industries." (2018: 4276). In the continuity of this thought, David (2020) explains that the platformization of culture consist in "processes of cultural reordering" around digital platform logics and argue that these processes implies "a relentless logic of quantification and commodification closely tied to the neoliberal logics of platform capitalism, that tends to reduce all social transactions to market transactions" (2020: 84).

As transnational platforms – especially Americans and increasingly Chinese ones – and including a wide range of national and local platforms have been massively deployed in the Global South in the past decade, analyses have been concerned not only with their impact on socio-economic local dynamics but also with their limitations. While being careful with the geographic and historical specificities of the territories in which these platforms operate, their cultural or linguistic characteristics, as well as regulatory framework, it appears that they have to various extent, contributed to the stimulation of creation offers, given new opportunities to local talents, helped certain creators' visibility, and strengthened the local industrial fabric and its economy. However, by contrast, the processes of capitalizing on a set of local cultural resources and workers still being poorly integrated into globalized circuits, have also been underlined.

More specifically, regarding the question of reorganization in work processes, studies on music and film industry have tackled the status of "artist-entrepreneur" strongly promoted by platforms' logic, with a multiplication in the number of tasks to handle and execute, including an increasing number of non-cultural tasks (Importa 2018; Ithurbide 2020). This tendency begins with the observation of certain artisans-entrepreneurs who are compelled to diversify their functions by market requirements, economically driven to integrate into their activities the functions as to those of a photographer, client relation manager, brand designer, digital marketing etc. The incorporation of these practices tend to be presented as compulsory with the market becoming more and more competitive. This situation is rather complex because it can end up in self-exploitation with conflicting feelings as highlighted by previous researchers. As Bhatia (2020) outlines, there is "politics of deception" behind the myth of the self-employment in which people believe they can switch on and off anytime. Digital

mediation is also increasingly linked with geolocalisation processes, tracking systems and different surveillance systems embedded in their logic.

Tensions also emerge due to an easier and faster access to the local or international market via social and e-commerce platforms, which however does not automatically translate into revenue, or of making a living from their activity. Further, creators and artists have also been seen as an "adjustment variable", as Bouquillion and Moreau (2019) explain. The authors emphasize that "their remunerations have often declined, especially for creators whose insufficient reputation does not allow them to contribute centrally to the construction of the value of cultural productions" (2019: 12).

A third question concerns the concentration of power in the hand of a small number of high-capital players and the risk of oligopoly. How much alternative to venture-capitalist platforms can emerge in such a context? While lots of attention has been given to music or film, we will see that this question also appears in the case of the craft sector with the domination of the e-commerce market by few transnational and capitalist venture-driven firms, who have the commercial, financial and technological means and capability to keep integrating a larger number of users and sellers globally.

Our research question can then be formulated as follows: to what extent has the Covid pandemic strengthened the use of digital platforms and accelerated certain processes of reconfigurations, and allowed specific forms and processes of integration even further? We will defend the hypothesis that while the craft sector remains largely exposed to various levels of precarity, and evident even more so during the global pandemic, this particular moment of crisis has accelerated various ongoing experimentations and processes of digitally integrating the craft industry to emerge, and integrate into the competitive dynamics of the global market via digital platforms.

In the continuity of earlier collective and individual researches we conducted about craft and design in India<sup>3</sup>, cultural industries and digital technology<sup>4</sup> but also about digital infrastructures and e-governance<sup>5</sup>, we initiated an exploratory research in early 2020 in Assam, focusing on the transformation of the craft sector in the context of the deployment of digital platforms. More specifically, the aim was to analyze the processes of industrialisation and restructuring of craft activities with the arrival of new players from the communication industries (encompassing telecommunications, e-commerce, Web technologies firms) and the adaptation of work dynamics for artisans (artefacts, productivity, distribution). While we were able to conduct this first fieldwork in February 2020, the Covid outbreak and its direct impact led us after a few months to resume the discussion with all the contacts we met, and conduct a series of online follow up interviews from September 2020 to January 2021.

Our methodological approach is largely qualitative and relies on both document analysis (annual reports of the industrial players, documents issued by the public authorities and non-

<sup>3</sup> Research Project coordinated by Philippe Bouquillion, Julie Peghini and Catherine Servan-Schreiber which led to the publication *Artisanat et design.Un dessein indien* (2018) Collection Labex ICCA, PeterLang.

<sup>4</sup> This research was initiated and funded as part of the research programme "Cultural Industries in India: Digital, Plateformes and Regulation" co-directed by C. Ithurbide and P. Bouquillion under LabEx ICCA to better understand the modes of organization of the cultural and creative industries in India and their socio-economic transformation in the context of recent digital infrastructure and policy evolutions.

<sup>5</sup> See Khetrimayum Monish Singh, 2019 'From Ration Card to 'Data Citizen': A Study of E-Governance in Assam', Thesis from Centre for Studies in Science Policy, School of Social Sciences, Jawaharlal Nehru University, New Delhi.

government organizations, and press reviews) and on an ethnographic approach through semi-structured interviews in English and Assamese, and direct observation of artisans' environment and work practices. About 15 semi-structured interviews have been conducted pre-Covid in Guwahati and surrounding localities (Bijoynagar, Sarthebari) with a diversity of players from the government agencies related to craft and handloom industries, private organizations, founders of e-commerce platforms and artisans. There were followed by 7 interviews post-Covid-lockdown with artisans, local entrepreneurs and NGO professionnals through video-call platforms such as WhatsApp and Google Meet. Those online interviews aimed at understanding what happened for each of them when the lockdown started, if and how it changed their way of working and especially the evolution in the use of digital tools and relation to e-commerce platforms. E-commerce platforms have also been approached as an online space of observation where qualitative information and data have been collected, compared and reviewed. This step turned out to be important for the analysis of strategies of the different players and put in perspective with fieldwork survey, complementing *in situ* investigation.

# **Contextualizing Craft Sector in Assam and the Rise of Platforms**

The craft sector relies on a majority of small, highly labour intensive and decentralized structures. Over the past decades, it has been facing important structural issues well discussed in literature (Jain 1985; Dhamija 2003; Planning Commission, 2005): lack of access to markets and consumers directly (other than those selectively organised by the cooperatives such as trade fairs etc.), the role and complexities of intermediaries facilitating such uneven access in rural areas, difficulties in renewing the quality of production and sales of products, the issue of logistics faced by a largely unorganised sector and finally low wages for artisans leading the young generation toward other activites. This situation has led to structural reconfigurations taking place notably through design and favored the entry of new actors, especially designers, NGOs and intermediaries, playing an important role in the organization of the different stages of the sector, from creation, production and distribution (Bouquillion, Peghini, Servan-Schreiber, 2017). Design gave « an economic boost to craftsmanship by rationalizing production as well as by renewing the ways in which it is marketed » (Bouquillion, 2016). However, historical difficulties largely remained and recently, the double effect of the GST and demonetization has left this sector struggling even more (CCI, 2018). To that extent, the recent experiments and injunction to use digital platforms appears as a new stage in a process of rationalization and marketing of productions. Platform operators promised to "empower" artisans and local entrepreneurs, to connect them to global market bypassing usual intermediaries, and to offer an "enabling environment for learning in terms of market demand, market trend, design and product competitiveness" (NEDFI, 2018). Hence, a rhetoric on platform as « solution » has been settling among public policy and industrial discourse.

Assam is a particularly relevant state for such a study. It has a very rich craft production covering a great diversity of material, including weaving and handloom<sup>6</sup>, cane and bamboo, brass and bell-metal, mask-making, pottery, jewellery and paintings. Hence, craft represents an important source of employment and revenue in the state. It is also a state which has been actively implementing the « Digital India »<sup>7</sup> National Programme launched in 2014, and

<sup>6</sup> Handloom from Assam represent 1/3 of the production of India and the first state for the number of weaver households, according to the Fourth All India Handloom Census 2019–20 p.33.

<sup>7</sup> Digital India is a National programme launched by the Prime Minister in 2014 with the aim at « transforming India into a digitally empowered society and knowledge economy », strongly pave the way for collaboration with IT solution partners ».

has been chosen by several global Tech giants as a pilot state to test their training and e-commerce programs for craftsmen and SMEs (Amazon Kala Haat, Facebook Boost your Business, Microsoft ReWeave). At the same time, local entrepreneurs have launched digital platforms (Getkraft, Brahmaputra Fables, etc.), giving rise to the question of alternatives models. Most artisan communities in Assam had until recently limited access to digital infrastructure and services, and therefore the promises raised by the current deployment of digital technologies and associated programs are immense<sup>8</sup>.

In Assam, a majority of artisans work from small household units with only a handful of clusters and large enterprises. Cooperatives societies exist within the different sectors of activity (bell metal, bamboo etc.) and are particularly important in the handloom sector. Craft production usually operate under the supervision of a master craftsman and with hired workers. In the case of handloom sector, 60% of hired weavers are migrants mostly belonging to disadvantaged social categories, Scheduled Tribe (ST) and Other Backward Classes (OBC) (Das and Sutradhar, 2020). Hired workers often recieve advance payment, implying a debt-induced mechanism. Those small entreprises are run with very low capital, largely spent to purchase raw material and work with low daily value addition (*ibid*.).

Several training programs have been initiated by Central and State Governments but it seems that due to a certain lack of results, public authorities and NGOs have been increasingly collaborating with private partners, including more recently with e-commerce and web giants such as Amazon, Facebook or Flipkart. A study by the North Eastern Development Finance Corporation (NEDFi) found that despite having bank linkage and mobile phones, the region's weavers and artisans lack awareness about digital marketing (NEDFi, 2018). In March 2017, the North East Craft Conclave was organised in Guwahati, promoted by the NEDFi, with the aim to facilitate the tying up between leading online portals involved in marketing of craft products, and local artisans, entrepreneurs and government agencies. The conclave highlighted the new role given to private digital players into restructuring the local craft industry and its market. According to the Chief Minister of Assam, they will contribute to provide global visibility which will ultimately help craft workers to grow their business (Singh 2017). This confirms a clear trend toward the promotion and implementation of digital platforms dedicated to craft workers well before the pandemic started.

Today, several e-commerce platforms dedicated to craft products are present in Assam. They have been initiated by different categories of players:

- Indian digital platforms like Gocoop, Etsy, Weavesmart or CraftsBazaar based mainly out of Bangalore or Hyderabad but referencing products from Assam.
- Transnational players from Communication industries especially Amazon, Facebook or Walmart-owned Flipkart through specific programmes: Amazon Kala Haat, Amazon Karigar and Amazon Saheli; Facebook 'Boost your Business' dedicated to small entrepreneurs and artisans, and Flipkart Samarth; all of whom have signed agreements with Assam Government since 2017.
- A young generation of social entrepreneurs from Assam who have launched digital platforms essentially dedicated to North-East craft such as Brahmaputra Fables, Getkraft or Folkal.in.

Despite the drastic drop in the price of smartphones and lower internet connection costs since 2016, the number of artisans having access to smartphones remains limited as observed during fieldworks and confirmed by interviews, but a large majority of them has now access to a mobile. According to a NEDFI report (2018), 86% of the craft producers have bank linkage and 85% have mobile phones.

All platforms take a commission on the craft product's selling price, while only some of them are also charging fees for enrolling on the platform, listing products or other digital services.9

While several e-commerce operators and non-profit organizations started to provide workshops in design development and digital training in pre-Covid times, the former did not always have a lot of success because artisans were not taking the digital medium seriously, as the next part will also explain in more detail. When artisans have a smartphone, one issue they face can be digital literacy, to which can be an added language barrier due to large spread of English over Indian languages. A second issue is that often very few of them have the time or the will to use e-commerce platforms as this time would be taken from their production work. As such, some of our current repondents' earlier inclinations point toward the usage of smartphones for leisure and entertainment (reaching friends and familly, listening to music) rather than for business. Many respondents in the rural areas were also those who did not have any prior access or knowledge of using devices (and therefore platforms) until the pandemic accelerated the potential usage of smartphones for their businesses.

Therefore driven by the circumstances of the lockdown, the use of marketing and sales strategies by the artisans themselves became more creative and innovative in helping them connect with consumers directly. There was a role of two important factors in this. One was the role of « platform based intermediaries » such as Antaran Tata Trusts and local social entrepreneurs through their capacity building activities (such as videos classes to teach how to use Google Meet, Facebook for Business, Instagram, etc. and the integration of more artisans within the platforms run by the social entrepreneurs respectively). The other was the intergenerational dynamics of a younger set of artisans, mostly the kin of the older generation of artisans, who were instrumental in helping them navigate through the dynamics of a platform based market economy. Our subsequent sections is an attempt to highlight some of these dynamics.

### **Digital Experiments During COVID: Perspectives From the Artisans**

The COVID lockdown period for the artisans seems to have favoured learnings and experiments with digital technologies; more specifically with social media platforms, allowing specific forms of independent economic activity to emerge among artisans. As providers of the actual products to other e-commerce platforms or to individual buyers <sup>10</sup>, the logistical constraints have been most severely felt by the artisans who had no means of financial sustenance, the lack of access to local markets or raw materials, and lack of traditional modes of communication.

The particular lack of access to markets and modes of communication became a major cause to the eventual nudge towards doing business online during the lockdown. While artisans are used to making most of their revenues from events such as Craft fairs and exhibitions or pop-up stores, with the Covid lockdown all those « offline » events were cancelled, and it was evident that it had become an unsustainable period for such activities.

<sup>9</sup> Exact figures are not systematically disclosed by the companies and vary depending on the goods/services. Initial findings enable to mention an average commission of 15% on product's selling price, with differences going from GetCraft (5-10%), GoCoop (12–15%) to Amazon (between 8-12% and 17% according to sources).

<sup>10</sup> References will be made in this article to two different types of business relations known as B2B (Business to Business) and B2C (Business to Customer). This marketing vocabulary is often used during the interviews with craft entrepreneurs.

Hence, the lockdown suddenly affected artisans' traditional model of business, as they could not sell their products at exhibitions where they would also get to interact directly with the buyers about their products. Due to this situation, our research shows that artisans began to consider « online business » as an option to have access to buyers and to sell their stock).

For instance, Firoja Begum, a craftswoman from Kamrup District told us about her experience :

« First time it (business) was not online... Before the lockdown, we used to work at exhibitions or depending on orders placed ... But since the lockdown, most of our work has become online ... as most of our stock was getting collected or was at home, the online process was done for us [by Antaran Tata Trusts]. (Interview December 2020)

The role of private players already existing on the ground has been pivotal in making this shift. For instance, Antaran Tata Trusts<sup>11</sup>, have been operating in craft rich regions such as Assam for a while now, facilitaing and mediating local craft workers with a global economy through outreach programmes of capacity building etc. which are often profit based social commitments (such as in the case of CSRs of private companies). As such, our interviews with officials from Antaran Tata Trusts also revealed that there were already digital literacy initiatives underway, much before lockdown to teach artisans how to use computers and platforms such as WhatsApp, Instagram and Facebook via smartphones in order to enable artisans to connect with clients through digital platforms. However, the number of candidates for those classes were low compared to the total number of artisans associated with Antaran Tata Trusts. The demand significantly increased during and post-lockdown periods, and classes were conducted online as noted by Gautam Sharda at Antaran Tata Trusts. Most importantly, this allowed a transition from Antaran's team handling most of the online processes, into craft workers managing themselves.

« I was not using Instagram a lot before the lockdown even if I had it [the app], I did not pay much importance to it. But after the lockdown, when ma'am [manager from Antaran Tata Trusts] and everyone taught us how to use it, then I started using it a lot...I realised that big buyers were also very active on Instagram and were doing business like that...Now, many [artisans] are doing business like that [on Instagram] ...I also heard about it [WhatsApp Business] the first time during the lockdown...they [Antaran Tata Trusts] also taught us how we can do business through WhatsApp by making a catalogue of the products ». Firoja Begum (Interview December 2020)

« Earlier we did not use smartphones...They [Antaran Tata Trusts] taught us how to use the computer and the mobile...how to use Instagram, Facebook, Google Pay and how to make catalogs and use Google Drive...Since the lockdown, we have learnt how to sell online, and we have met a lot of buyers from far away places. I had never dreamt/ imagined that I will ever be able to use a mobile phone. It is a very big event in my life...» explains Kabita Kalita, another craft worker from Kamrup District. (Interview December 2020)

Both craftswomen explained that they have also learnt how to make posts on the apps and to take photography of their products, « good photographies » Firoja emphasized, for which earlier they used to depend on Antaran Tata Trusts. Their testimony indicates that the lockdown expedited the process of learning how to handle social media which has helped

<sup>11</sup> Tata Trusts is one of the earliest philanthropic organization of India, founded in 1919 by Tata Group, an multinational conglomerate, headquartered in India. Antaran is an initiative of the Tata Trusts focusing more specifically on craft-based livelihood programme.

them connect with buyers directly. Despite a difficult situation to cope with, both women's experiences outline positive outcomes and a genuine pride from being able to manage their own business online, recalling that they are coming from a modest and rural background.

« We could not go anywhere, and we had to do everything at home. Even if it [the online process] was very difficult, it was profitable for me ... even if Covid was bad for a lot of people, it has done a lot of good [in terms of business] in my life » Kabita Kalita (Interview December 2020)

Another consequence of artisans' handling their product on digital platforms has been to diminish their dependency upon certain local intermediaries and allowing them to have direct interactions with the buyers. This mode of interactive business enabled them to access different forms of feedback loop (through user reviews and repeat orders) that were very much appreciated by the two craftswomen, exhibiting forms of digital competency necessitated by the lockdown crisis and mediated through the digital literacy programmes. As such, digital mediation also implied other forms of dependency which are driven more towards artisans interacting independently and directly on a global market economy via social media platforms or via e-commerce platforms. While the economic outcome of using digital platforms will need further analysis, there are expectations coming from their recent enrolment into several e-commerce platforms:

« Right now there is not a lot of sales, but I am still trying to do business online. I have also done my registration on GoCoop, on FabIndia ... Since I am registered I will have to do more work. Now I know how the online [business] works » Firoja Begum (Interview December 2020)

Certain tensions seem also to emerge in this transition from "offline" to "online" ways of doing business. Firoja mentions two principal aspects related to price negotiations and to multitasking:

- « The difference between online and offline is that offline we ourselves advertise [the products] or the buyers can touch and buy the products. But online there is always some confusion as to how the product is or there would be some price negotiations... Offline, many [buyers] do not even ask or negotiate prices because they can see and touch the product. But online because the buyers cannot see or touch the products, that is why they keep asking for discounts etc ».
- « If we have to do online business, whether it is photography or other work, we have to constantly keep using our phones and pay more attention and importance to that work. We do not have to do this in the offline » Firoja Begum (Interview December 2020)

As such, while these transitions to the interactive model and processes of digital platforms have allowed a specific form of non-intermediary independent business for artisans to emerge during the lockdown, nonetheless certain tensions as to the conflicting dependencies and differences between conducting offline business and online business remains as concerns for them.

# Adjustment of Platform Strategies by Local Entrepreneurs During COVID

Local entrepreneurs such as Brahmaputra Fables, Folkal.in, and GetKraft, were more immersed and aware of the local problems of the craft industry, especially exacerbated by

the pandemic.<sup>12</sup> As social entrepreneurs, most of them were involved in directly negotiating with the artisans and/ or were also involved in interacting with the artisans directly at the workshops.

« There were not social distancing possible in the workshops. Those places you have visited<sup>13</sup>, the workshop, it is not possible to apply social distancing norms, so they were shut and artisans couldn't earn their daily wages. Our e-commerce platforms and logistic was also made complicated, even if customer start ordering we couldn't ship anything. Two months of lockdown were a very tough time for us, and our artisans suffered a lot and their livelihood got badly affected ». Dhruba Jyoti Deka, Brahmaputra Fables (Interview October 2020)

While most clusters and craft workers have been facing the same difficulties (how to deal with unsold inventory, to distribute orders to consumers, or to get new commission and deal with shortage of raw material), there have also been certain differences among the various craft sectors. Handloom sector has been able to adapt its production more easily during the health crisis with notable transition into mask making.

« In Assam, Dilip Barooha, founder of Fabric Plus, was among the first to start making mask with eri silk<sup>14</sup>. Early April 2020, cloth masks were approved by the Government. So we transferred into this. We had our samples ready before the announcement. So when the announcement came, we had our handloom ready. We started with 30 artisans, mainly craftswomen, and we had recently around 250 artisans based across different locations, from Sarthebari, or Barpeta Road producing masks. We were dealing with bulk selling (100 or 300). We associated with NGO to distribute masks for underprivileged communities. Currently we see declining demand in masks ». Dhruba Jyoti Deka, Brahmaputra Fables (Interview October 2020)

Handicraft, on the other hand, was impacted economically even more. Dhurba explains that among the cluster he has been working with, some brass metal artisans who did not know about tailoring, started to make masks to be able to sustain their families.

Most entrepreneurs and local representatives interviewed confirm that they observed a transition to the digital platforms following the Covid-19 Lockdown.

« Before Covid, it was tough to enlist new craftsmen on our platform, but now it is getting more easy... Artisans from Sarthebari are much more aware of e-commerce platforms now and want to sell online. Some young people tell « uncle, you should use platform » It was long time coming but Covid accelerated to next level ... Some also realised that they were putting pictures on Facebook but were not being sold. Some students have been helping during lockdown to create Instagram accounts for artisans. So we integrated around 50 new artisans from Assam and a few from Nagaland on our platforms and now they are making good amount of money through Brahmaputra Fables. We also encourage them to enlist their products on Amazon Karigar or Flipkart Samarth ». Dhruba Jyoti Deka, Brahmaputra Fables. (Interview October 2020)

<sup>12</sup> It would be worthwhile to mention here that most of these local entrepreneurs interviewed were often from the craft industry background itself, and were often products of incubation initiatives either by the state government (Assam Start Up Policy) or IIT Guwahati.

<sup>13</sup> Dhruba Jyoti Deka is refering here to the metal workers' workshops in Sarthebari village that we [authors] visited with him in February 2020.

<sup>14</sup> Eri Silk is a popular type of silk produced in Assam. Its production does not require killing the moth to extract the fiber, as in most silk production processes.

« New people have started to join us also from different states, not only Assam, different small entrepreneurs who have their own groups, self-help groups, they have started to work along with us [...] They have done research on Google on how they can increase their craft sale and online presence ». Rahul Baruah and Anupam Nath, GetKraft (Interview January 2021).

Sharda Gautam also comments on the evolution of the situation in the Assam clusters with which Tata Trusts Antaran is working:

« Last year, only 2 or 3 artisans-entrepreneurs in our clusters in Assam showed interest in learning social media and did a post once in a month, but now if you go on the social media, you will see that now artisans have become so adapted using social media, every day they have their own timing, 7.30 am would post this or evening 6.30 would post this when people browse on their Instagram etc. That learning has come post Covid [...] And all of them are female entrepreneurs. So their family was not expecting this activity to become a source of livelihood. Maybe compared to other Indian states, it took a little longer but once they picked up, the family could see the benefit; with the lockdown husbands couldn't go and work outside, in crisis when you are able to salvage your family, that's where the trust from your family gets higher. »

« One fall out has been for villages (which were) a bit far away and for artisans without smartphones, so they were a little left out, so now we are trying to make an effort so we have started mapping who are the artisans without smartphone ». (Interview December 2020).

In the line of Kabita and Firoja's firsts observations regarding the new challenges related to do online business, Gautam Sharda has also observed the difficulties of artisans to adjust to multitasking. He remembers an artisan from Nagaland who texted him during the lockdown « Sir, should I weave or should I speak to the buyer? » and he texted her back to speak to the buyer or otherwise someone else will take the order. When the artisans then asked « what is the solution? », he suggested putting an earphone and weave, so when the buyer calls her, she could talk and continue weaving. Reflecting upon this experience, he told us that this is going to be a complex journey, not just because of their inability to invest in stock but also because online business is time consuming.

While an increasing number of artisans are now willing to make this time investment to upload their product online and to be present on Instagram, it is not always meeting their initial expectations or turn out to be as economically rewarding as they thought. Dhruba Jyoti Deka (Brahmaputra Fables) and Himujjal Sharma (Folkal.in) pointed out in their interviews that many of their vendors are using Facebook or Instagram, but from a selling point of view or getting orders, it is still difficult for them. Some artisans are also getting enrolled on Amazon or other big platforms but to handle inventory, supply, and put their product online is a tedious process. In fact, the Covid has fastened the process of integration of artisans and small entrepreneurs on the social platform, as several platforms' founders explained to us:

« It is not easy for those small scale entrepreneurs to do marketing and all, so they decided to tie up with platforms already selling craft like us. Today they have an average 40 partners from all over India ». Rahul Baruah and Anupam Nath, GetKraft. (Interview January 2021).

The pandemic context also seems to have prompted digital innovation for the craft sector. Since October 2019, Tata Trusts has been working on the conceptualization of an app-based platform called 'Craft Xchange', which is to be launched soon. The app will provide an interface for B2B buyers and artisans, aiming to facilitate selection of production, co-design development and buying processes. More precisely, the app will allow to track the progress at every step of the production and distribution, as explains Gautam Sharda:

« When order is confirmed there will be a time chart that would flow if artisans is developing the product, by when will she/he get the raw material, by when the raw material will be processed, by when it could be put up on the loom, by when the weaving will happen, by when the sample will be out. So all the substeps will be broken down and every substep which is marked on the app, artisans will receive a notification if they don't update on the schedule time, so it becomes more automated for artisans to follow up... It is a system that will help bringing transparency between artisans and buyers and accountability and timeliness ». (Interview December 2020)

If on one hand, the app project proposes to help craftsperson with several issues they were facing (for instance, many artisans often find difficulties with putting up the right invoice, so the app would automate the invoice process), on the other hand, this project also raises well known concerns about process of automation, standardisation and rationalisation in creative work. Jaya Jaitly, Handicraft curator and President of the Dastkari Haat Samiti, explains feeling uncomfortable with processes of « homogenization and colonization almost of the craft sector by technology » and calls for the sector to « fight against standardization » (FICCI Conference 2020). While they promise more efficient time managment, digital applications also present the risk of reducing the producers' freedom to organize their time. Hence, this process of « platformization » of artisans' work requires awareness of potential conflict between the practices and aspirations of creative workers and needs and objectives of industry increasingly digitally-driven (Bouquillion et al. Upcoming).

#### Big Platforms Operators' Response to the Covid-19 Pandemic

There have been general efforts from platform operators to facilitate the situation for craft workers, but with different outcomes. In July 2020, Amazon announced the launching of its 'Stand for Handmade' scheme with 100 per cent SoA (Sell on Amazon) or fee waiver for 10 weeks. According to the Operator, this scheme benefited about 10 lakh artisans and weavers, including more than 2.8 lakh women entrepreneurs from Amazon Saheli programme. The offer also extended to new sellers joining the two programs during this period (Amazon, 2020). A « group health insurance benefit » was also introduced for the sellers to help them with the covering of medical expenses in case of hospitalization and treatment due to Covid-19 (*ibid.*). These initiatives would also be replaced in a context where Amazon's economic transactions were exceeding the pre-Covid-19 daily sales volume, ever since the lockdown was opened.

As underlined by Griffin, what this situation illustrates is that the biggest companies such as Amazon « have the financial power to weather short-term economic pain and expand quickly to take advantage of new opportunities » (Griffin, 2020b). An economic strategy that smaller startups would have more difficulties to put in place on a long term. Nevertheless, some of them still did, such as the Brahmaputra Fables, and even earlier than Amazon. Dhruba Deka explains that early April 2020, when he started mask making he did not charge for mask or for logistic « all was going to craftsmen ... As we are a social start up, our concern was to know if your employee and artisans could get paid and survive ».

But while bigger platforms could compensate with other sources of revenues, small platforms with niche markets were bearing a higher cost. Dhruba Deka comments on the change in buyers and market segments during the lockdown « I have seen a gap, our wealthy customer continued buying, but customer with low budget (Rs 500) were not buying anymore [...] Some companies like hotels who had placed important orders, shut down with the crisis » (Interview October 2020).

Behind the discourse of « support small businesses » impacted by the Covid, the pandemic crisis led to the enrollment of numerous small businesses into the largest marketplaces (in this case Amazon or Flipkart), which ultimately reinforce their position as aggregators ready to subsume local markets globally. For instance, Amazon has declared seeing new sellers emerging from previously untapped geographies including Hailakandi in Assam (Abrar, 2020). Similarly, Flipkart announced a 125 per cent increase in new sellers signing up on the platform for April-June 2020 and work with some 250,000 small sellers such as artisans, weavers, and craft workers (*Ibid*). Hence, we observe a territorial expansion of the biggest companies and the acceleration in the integration of smaller players whose more or less short term economic benefits will still need to be evaluated.

This period has also seen the strengthening of partnerships between Central and regional state bodies related to handicraft and handloom and private technology players. The most relevant example is the integration of 22 State Emporiums - the government iconic marketplaces for craft - on Amazon e-commerce platforms. From a communication strategy perspective, this move from Amazon has been powerful and reinforced the positioning of the e-commerce giant as a privilege partner of public institutions, a situation leading to a larger debate on the substitution of public offer by private services, especially in the cultural sector. Hence, the overall context appears to have mostly benefited the already massive ecommerce players. Instead of a situation of direct competition with a wide range of national and local platforms, we observe a process of the integration of new craft sellers into the largest e-commerce platforms in complementary to their own online business. The analysis from Griffin at a global scale about biggest tech companies winning out seems to rightly echoes the situation observed in India « The economic crisis gives big tech a unique opportunity to swallow up ever more market share and dominate new industries. Even after a post-pandemic economic recovery – whenever that might be – their strengthened positions will be extremely difficult for competitors or regulators to challenge » (Griffin, 2020b).

Lastly, this case study enables us to observe a process of financialization of the craft economy, a process often associated with the entry of powerful communication players into the cultural sector (Bouquillion 2013). The founder of Gocoop, Siva Devireddy, emphasizes that « In any market across the world, a couple of marketplaces end up dominating: in India that is Flipkart and Amazon. Market domination is the logic of venture capital » (Vitta, 2017). Interestingly, his platform did not make an exception to this trend.

### Conclusion

The movement of reorganisation of local craft industry around digital platform logics initiated since a few years has been suddenly accelerated with the Covid pandemic. While this sector will remain largely unorganized and dominated by cash for a while, a transition toward online businesses mediated by digital platforms - either social media platforms (WhatsApp, Facebook, Instagram) or e-commerce platforms - has started and has been reinforced during the month following the Covid-lockdown. Along with this ongoing process, several indications of the progressive reordering of the craft activities and economy to adjust with a

certain number of logic from the digital platforms have appeared. Further research should be conducted on the way the conception and production of traditional craft is integrating the notion of "branding" or feedback loop (comments, ratings from buyers). While beneficial outcomes, both in economic and personal terms (self-esteem, acknowledgment of skill) have been clearly mentioned in craft workers' interviews, more testimony will allow to corroborate or help give more nuance to these initial findings. Tensions related to the new status of self-entrepreneurship identified within other cultural sectors (multitask handling, time management) are also emerging and will require further analysis. More specifically, the evolution of work conditions and remuneration along with forms of automation, standardisation and rationalisation of the production stands as points of concern for the way forward.

As artisans' business models are also evolving, the question of the articulation between "online" and "offline" activities will be very much at the heart of the reorganisation in the coming months. If a small number of artisans made more sales during the Covid crisis than in "normal time", a broader survey will be necessary to draw a more precise conclusion. New adjustments may also be necessary once craft fair and exhibition restarts. Will e-commerce sector becoming as rewarding as expected for artisans or will they continue to earn much more at a craft bazar, as Jaya Jaitly is assuming? (FICCI Conference 2020). The promise of integration into the global economy for craft workers once enrolled on larger platforms will need to be monitored as the traditionally major revenues rather come from local buyers. Until recently, the continuing restrictions since the first lockdown have impacted inter-district travel of people and have also limited services of essential goods, which are however allowed only through e-commerce companies by the state govt, and consequently increasing the dependencies on such platforms (Parashar, 2021).

While there is lots of hope placed into digital tools and especially digital platforms for artisans, some of the learnings of this exploratory research are to avoid any systemic deterministic approach of digital tools and rather continue to focus on the modalities of the appropriation of these technologies (De Certeau 1980; Appadurai 1996) which can vary considerably from one individual to another, and from one platform to the other. The "revolutionary" and "emancipatory" potential of digital technologies needs to be confronted with fieldwork analysis and ethnographic methodology while the changes underway needs to be put in perspective within a political economy approach, to better understand their integration into larger dynamics at stake.

#### **Bibliography**

Abrar, Peerzada. 2020. « Amazon, Flipkart help small businesses get ready for post-Covid-19 world ». Business Standard, July 5, 2020. Retrieved January 2021 <a href="https://www.business-standard.com/article/companies/amazon-flipkart-help-small-businesses-get-ready-for-post-covid-19-world-120070500763\_1.html">https://www.businesses-get-ready-for-post-covid-19-world-120070500763\_1.html</a>

Al Dahdah, Marine, Mathieu Ferry, Isabelle Guérin and Govindan Venkatasubramanian. 2020. "The Covid-19 Crisis in India A Nascent Humanitarian Tragedy ». *La Vie des Idées*, 13 April 2020.

Amazon Blog. 2020. "Amazon's 'Stand for Handmade' initiative to help 10 lakh weavers, artisans and women entrepreneurs in India ». July 1, 2020. Retrieved January 2021

https://blog.aboutamazon.in/supporting-small-business/amazons-stand-for-handmade-initiative-to-help-10-lakh-weavers-artisans-and-women-entrepreneurs-in-india

Amorim, João Pedro and Luís Teixeira. 2020. « Art in the Digital during and after Covid: Aura and Apparatus of Online Exhibitions » Rupkatha Journal on Interdisciplinary Studies in Humanities. Vol. 12, No. 5, 2020. 1-8.

Appadurai, Arjun. 1996. *Modernity at large. The cultural dimensions of globalization.* Minneapolis: University of Minnesota Press.

Athique, Adrian, Vibodh Parthasarathi and S.V. Srinivas. 2017. *The Indian media economy - vol. I: industrial dynamics and cultural adaptation.* Janpath, New Delhi.

Athique, Adrian and Vibodh Parthasarathi, eds.2020. *Platform Capitalism in India*. Global Transformations in Media and Communication Research - A Palgrave and IAMCR Series. Palgrave Macmillan, Cham.

Balasubramaniam, Chitra. 2020. « The craft connect during COVID ». *The Hindu*, May 21 2020.

Bhatia, Akriti. 2020. « Whims of a digital boss: App infrastructures and insecure work ». Conference Media Infrastructures: Informalities and Marginalities, OP Jindal Global University, February 13-14, 2020.

Bercegol, Rémi de, Anthony Goreau-Ponceaud, Shankare Gowda and Antony Raj. 2020. « Confining the margins, marginalizing the confined: The Distress of Neglected Lockdown Victims in Indian Cities », *EchoGéo*, May 2020.

Bouquillion, Philippe, Christine Ithurbide, Vibodh Parthasarathi and Sneha Puthiya Purayil, eds. (Upcoming). Locating Digital Creative Industries in India (Sp. Issue), *Contemporary South Asia*.

Bouquillion, Philippe, and François Moreau. 2018. *Digital platforms and cultural industries,* Peter Lang.

Bouquillion, Philippe. 2016 « Les enjeux des industries créatives en Inde », *Les Enjeux de l'information et de la communication* 2016/2 (n° 18), p. 39-53.

Bouquillion, Philippe, Julie Peghini and Catherine Servan-Schreiber. 2017. *Artisanat et design Un dessein indien*?, Peter Lang, Collection LabEx ICCA, Paris.

Bouquillion, Philippe, dir. 2013. *Creative Economy, Creative Industries : des notions à traduire*. Saint-Denis, Presses universitaires de Vincennes.

Bullich, Vincent and Laurie Schmitt. 2019. « Les industries culturelles à la conquête des plateformes ? », T*ic&société*, Vol. 13, N° 1-2.

British Council, FICCI and Art X Company, 2020 « Impact of Covid-19 on India's » Creative Economy. Retrieved July 2020. https://www.britishcouncil.in/programmes/arts/arts-survey

Casilli, Antonio, and J.P. Gutiérrez. 2019. "The Plateformization of Labor and Society", in Graham M. et Dutton W.H. (eds.), *Society and the Internet; How Networks of Information and Communication are Changing Our Lives*. Oxford University Press.

Casilli, Antonio. 2016. "Digital labor studies go global: Toward a digital decolonial turn". *International Journal of Communication*, 2016, vol. 11, p. 3934–3954.

Craft Council of India (CCI). 2018. Newsletter February 2018, p.8-9. Retrieved Febuary 2020. <a href="https://s3-ap-south-1.amazonaws.com/ccicraft/wp-content/uploads/CCI-Newsletter-Feb-2018.pdf">https://s3-ap-south-1.amazonaws.com/ccicraft/wp-content/uploads/CCI-Newsletter-Feb-2018.pdf</a>

Center for Internet and Society (CIS). 2019. "Mapping Digital Labour - Panel discussion on platform-work in Mumbai and New Delhi". Organized by Centre for Internet and Society. July 19, 2019.

Das, Anamika, and Rajib Sutradhar. 2020. Handloom Weavers and Lockdown in Sualkuchi Cluster of Assam. *Economic and Political Weekly*. September 26, 2020. Vol IV n°39. p.23-25.

David, Mark. 2020. « Five Processes in the Platformisation of Cultural Production: Amazon and its Publishing Ecosystem ». *Australian Humanities Review* 66 (May 2020).

Dhamija Jasleen. 2003. *Handicrafts of India: Our Cultural Tradition*. National Book Trusts, India

De Certeau, Michel 1980. L'Invention du quotidien. Paris, 10/18.

Desage, Fabien, and Jérôme Godard. 2005. Désenchantement idéologique et réenchantement mythique des politiques locales, *Revue française de science politique*, vol. 55, n°4, p. 633-661.

Federation of Indian Chambers of Commerce and Industry (FICCI). 2020. « Recrafting & Tailoring Artisanal Practices for New Digital Economy », Online Conference, November 6th, 2020.

FICCI-EY. 2016. *Creative arts in India: Theater, dance and crafts industry*. Ernst & Young LLP. Published in India.

Gillespie, Tarleton. 2010. « The Politics of "Platforms" », *New Media & Society*, vol. 12, n° 3, p. 347-364.

Graham, Mark, Isis Hjorth, and Vili Lehdonvirta. 2017. Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer; European review of labor and research*, Vol. 23(2) p.135–162.

Griffin, Rachel. 2020a. « Social media and content moderation in times of covid19 ». Science PO blog. Retrieved January 2021. https://www.sciencespo.fr/public/chaire-numerique/en/2020/07/09/social-media-and-content-moderation-in-times-of-covid-19/

Griffin, Rachel. 2020b. "Is the Covid-19 pandemic a victory for big tech". Science PO blog.

Retrieved January 2021. https://www.sciencespo.fr/public/chaire-numerique/en/2020/08/13/is-the-covid-19-pandemic-a-victory-for-big-tech/

Hesmongdhal, David, and Leslie Meyer. 2018. What the digitalisation of music tells us about capitalism, culture and the power of the information technology sector. *Information Communication and Society* 21(11):1-16.

Improta Gabriel 2018. « One man band : l'instrumentiste de Rio de Janeiro à l'ère des plateformes », Les Cahiers d'Outre-Mer, 277 | 2018, 165-190.

Ithurbide, Christine. 2020. « Telecom and Technology Actors Repositioning Music Streaming ». In: Athique A., Parthasarathi V. (eds) *Platform Capitalism in India.* Palgrave Macmillan.

Ithurbide, Christine, and Vassili Rivron. 2018. « Industries culturelles et plateformes numériques dans les Suds : des reconfigurations sociales et spatiales en question », *Les Cahiers d'Outre-Mer*, n°277, p.5-36.

Jain, Jyotindra. 1985. *Master craftsmen: An introduction to crafts of India*. Pamphlet – January 1, 1985.

Khetrimayum Monish Singh, 2019. 'From Ration Card to 'Data Citizen': A Study of E-Governance in Assam', Thesis from Centre for Studies in Science Policy, School of Social Sciences, Jawaharlal Nehru University, New Delhi.

Kumar Akshaya. 2020. « The Derivative Values of Platform Capitalism ». In: Athique A., Parthasarathi V., eds . *Platform Capitalism in India*. Palgrave Macmillan, Cham.

Mattelart, Tristan, Cédric Parizot, Julie Peghini and Wanono Nadine, eds. 2015. Le numérique vu depuis les marges. Marges et Numérique, *Association française des anthropologues*, p.9-27.

Mohan, Sriram, and Aswin Punathambekar. 2019. Digital Platforms, Globalization, and Culture. In Curran J, Hesmondhalgh D. 2019. *Media and Society*. 6th. Bloomsbury Academic.

NEDFi. 2018. « Techno-commercial feasibility study on e-commerce platform for marketing of handloom and handicraft products of the North Eastern Region ». NEDFi Study.

Nieborg, David, and Poell Thomas. 2018. 'The Platformization of Cultural Production: Theorizing the Contingent Cultural Commodity.' *New Media & Society* 20.11 (2018): 4275-92.

Organisation for Economic Co-operation and Development (OECD). 2020. *Culture shock: COVID-19 and the cultural and creative sectors*. September 2020. OECD.

Parashar, Utpal. 2021. « Assam extends total lockdown to 4 more districts to contain Covid-19 ». Hindustan Times, July 6, 2021. Retrieved September 17 <a href="https://www.hindustantimes.com/india-news/assam-extends-total-lockdown-to-4-more-districts-to-contain-covid19-101625566814824.html">https://www.hindustantimes.com/india-news/assam-extends-total-lockdown-to-4-more-districts-to-contain-covid19-101625566814824.html</a>

Planning Commission of India 2005. *Towards the National Mission for Creative and Cultural Industries*, Taskforce for Creative and Cultural Industry (3 vol.), New Delhi, 2005.

Singh, Bikash 2017. « Facebook, Assam government collaborate to help businesses ». *Economic Times*, May 11th 2017.

Srnicek, Nick. 2016. *Platform Capitalism*, Polity, Cambridge: Polity Press.

Vitta, Shweta. 2017. « How GoCoop is building an online marketplace for a million weavers and artisans in India » Yourstory.com, 28 Feb 2017. Retrieved January 2021 <a href="https://yourstory.com/2017/02/gocoop-2">https://yourstory.com/2017/02/gocoop-2</a>