Introduction

Digital platforms now play a central role in disseminating and promoting cultural, informational, and educational products, as well as creating and producing content. They have key positions in the recorded music (iTunes and YouTube), book (Amazon), audiovisual (Netflix), and video games sectors. While platforms allow end-users to access cultural content, others concern fundraising, particularly through crowdfunding, content recommendation, and promotion, the discovery of new artistic and creative talents, the renewal of productions, tickets sales, etc. Today's platforms have been preceded by others much older. For example, in the late 1970s, the French incumbent telecommunications operator developed a telematic service, the Minitel; or to cite another example, the Canadian cable operator Videotron offered from 1989 the telematic service called Videoway. In the 1990s, very large industrial players were created by combining within the same holding assets cultural content, Internet access, cable television, satellite packages, and telecommunications. The stated objective of these major players was to propose transnational *portals* offering content from various sectors of cultural industries and connection services. At the very end of the 1990s and until the stock market crash of 2001, the two dominant players in these portals were AOL Time Warner and Vivendi Universal, respectively the world's number one and two of the entertainment industries.

In short, although this question is old, its massive, multifaceted and highly evolutionary character explains how so many contributions have developed around these themes without exhausting the subject. Also, the research conducted at Labex Cultural Industries and Artistic Creation (ICCA), including this book, is part of a continuity of work. Our research integrates the results of the previous works while trying to extend them around two themes: on the one hand, the identification of the economic and socioeconomic characteristics of the digital platforms, including their business models; and on the other hand, the relationships between the historical players of cultural content and the actors who are more deeply rooted in the digital world. Given the considerable amount of work that has been done and the multiplicity of their objectives, we will limit ourselves to recalling some of the central orientations for understanding the changes underway in the cultural industries.

Much research has aimed to identify and categorize the various forms of digital platforms. Indeed, this common term covers devices whose modes of operation can be very different. Since the beginning of the 2000s, most of the work aiming to identify the operating modes of these platforms has been conducted in economics and management. Very frequently, research in these disciplines share the commonality of studying the platforms from the perspective of externalities. For instance, Annabelle Gawer and Mickael Cusumano (2013) have put the strength on the virtuous circle that is created because of the externalities between suppliers and consumers: the more numerous the offers and consumers on a platform, the more they are encouraged to *join* the platform. Hagiu and Wright (2015) emphasized this perspective and especially considered that only the devices in which the externalities not only benefit a type of user but at least two types of users (Hagiu, 2007) are multi-sided platforms (MSPs) (Hagiu & Wright, 2015). A distinction between MSPs and *stores* or *resellers* is then made (Hagiu, 2007). Some authors such as Tarleton Gillespie (2010, 2016) have also criticized the common notion of the term platform and more particularly the use that the industrial actors make of this notion. Metrics not only serve to evaluate uses and users, but are also brandished as advertising slogans to convince consumers of the quality of the supply.

Attempts by researchers in communication to characterize the platforms have focused on the question of socioeconomic models. Pierre Mœglin proposed the so-called *information brokerage* model. According to this author, the broker produces what is necessary to facilitate and maximize exchanges to take place between offers and consumers:

Information brokerage uses software that memorizes previous research and, by extrapolation, suggesting those to engage the [...] intermediary mandated by the user or his representative, the information broker produces nothing; it searches for ad hoc information and provides it on demand. The *fit* occurring when the information provided is deemed relevant and used by the person to whom it is addressed. The service that the broker realizes is personalized, which does not prevent it from being mediatized and industrialized (Mœglin, 2005, p. 225).

This model does not rely on a single type of valuation mode where the actor who occupies the central function is at the *end of the chain*, downstream; is not intended to intervene in the production of content. Pierre Mœglin sees the brokerage model as an ideal-type. Thus, the same digital platform can be described from several socioeconomic models (flow, editorial, counter, club, and brokerage). However, the reference to brokerage is central in the case of digital platforms.

This work provides a better understanding of the extent to which platforms intervene in the upstream sectors (production or influence on content) or, on the contrary, are organized to attract suppliers and consumers without intervening in content; how the cost functions are built (particularly in relation to the degree of automation in customer–supplier relationships); how valuation methods, pricing strategies, and, ultimately, regulatory issues, in particular those of competition policy and the policies for supporting cultural content.

Based on the notional tools produced in the previously identified research, a large body of work has attempted to assess the challenges of digital platforms for content and to study the relationships between the cultural industries' actors and players in the digital industries. Between the enchanted vision of an informational and cultural abundance – thanks to the digital and catastrophic scenario of a standardization of cultural productions under the leadership of a small number of digital platforms in a position of domination on a global scale, in particular the GAFAs the research carried out at LabEx ICCA has tried to better understand the balance of power between the different players. It has also sought to study the stakes for business models and the diversity of content. To do so, it was necessary to evaluate to which extent the platforms offer content with the objective of direct earnings from end-users (Netflix, for example) or whether content is also offered as a joint product. The objective was then to value the main offer of the platform operator, to distinguish it from that of competition and, if possible, to avoid price competition (as in the case of Apple). In the latter case, digital players may have different and evolving policies in content production. For example, Amazon has initiated an important and costly policy of producing original content while developing its audiovisual offers called Over-the-Tops (OTTs). In the context of the bottleneck position that platforms now have in most sectors of the cultural industries since replacing the former majors of the cultural industries, research has also focused on contestability of the markets. Pricing is also a very important issue. Platform players are frequently in a position to set prices for products that become reference prices for dematerialized productions of the same category. These rates are frequently at low levels compared to the rates previously charged by historical content players. Platform players tend to set low prices when their interest, at least in the short term, is not so much to maximize content sales as to strengthen the position of their platform in the market or when content is offered mainly as a joint product. The editorial and promotional strategies of platforms have also been studied by Bullich and Guignard (2014). According to these authors, beyond the technical standards, most platform managers

define and apply editorial criteria (*aesthetic-socio-politico-moral*) that is more or less binding and thus condition access to their platforms. This can be observed in the contract specifications of content providers, for example the ban on nudity on Facebook or Appstore (scrupulously controlled). Similarly, research has focused on the role of platform operators in defining the criteria for content recommendations. Algorithms are not *neutral* reflections of the choices of Internet users but correspond to choices on the part of operators of platforms, in particular within the framework of paid strategies of highlighting content. The value chain and added-value sharing among the various stakeholders were also studied. The tensions experienced by the historical content actors have been amply documented. The losses recorded by these players in terms of previous forms of valuation (advertising, subscriptions and sales to end-consumers) have generally not been offset by their share of new resources (e-advertising and data). In various sectors, including for example audiovisual, creators and artists have also been seen as an adjustment variable. 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. Similarly, the challenges of platforms for public policies have been the subject of various studies. In the case of French policies, in particular the ones carried out by the Ministry of Culture, it appears that existing measures have difficulties in taking into account the transnational dimension of the current cultural economy, while the responses to the digital challenges try above all to preserve as much as possible the sectors' previous regulations and modes of organization.

The various papers gathered in this book contribute further to these different topics with a focus on empirical issues. This volume is the follow-up to an international conference organized by LabEx ICCA in Paris in November 2016. It is organized in two parts. The first one gathers the contributions dealing with the analysis of the impact that digital platforms have on the incumbent or legacy players of the original value chain of content industries: content providers, live entertainment producers, consumers, etc. The second part opens the black box of the ecosystem of digital platforms by studying competition among them and among the business models they adopt, as well as the conditions for the emergence of new players.

Part I, entitled "The Impact of Digital Platforms on Incumbent Players," starts with a contribution from Pierre-Jean Benghozi, Elisa Salvador and Jean-Paul Simon: "The Race for Innovation in the Media and Content Industries: Legacy Players and Newcomers: Lessons from the Music and Newspaper Industries." In it, the authors analyze the bilateral relations between the reaction of content providers to digitization and the position of IT platforms. Using two case studies on the newspaper and music industries, they stress that legacy players see digital technologies more as a threat than as an opportunity and that they hardly accept the notion that the Internet cannot merely be used to develop the existing business model but that a radical change is required. Conversely, newcomers that are more agile at identifying new opportunities, and that do not have to deal with the issue of covering the costs of content creation, have made the content value chain much more complex and have developed new forms of interactions with their customers (e.g. recommender systems) that contribute to make the agendas and strategic goals of IT platforms different from the goals of legacy players.

In "Digital Platforms and Performing Arts: Communication of Theatrical Institutions, Audience Development, and Platform Strategies of Industrial Players: A Case Study of the Gérard Philipe Theater, National Drama Center (CDN) in Saint-Denis," Christine Bellavoine, Philippe Bouquillion and Louis Wiart deal with the new issues raised by digital platforms for the performing arts in France, especially for the so-called *quality* public theater. They posit that the socioeconomic players, especially in the fields of the performing arts, which remain outside integrated groups that include digital platforms would end up marginalized. From the case study on the Théâtre Gérard Philipe located in the suburbs of Paris, they conclude that theaters, although aware of the impact of digitization on their communication, promotion, and marketing strategies, do not seem to see digital platforms, and especially ticketing platforms, as a major threat for the time being. Moreover, the type of performances offered by state-funded theaters is not currently central to the platforms' strategies.

Then, in "Ticketing Platforms and Big Data Strategies: Data Analysis in the Live Entertainment Industry in France," Louis Wiart expands the previous research beyond the case of public theater. He studies the strategies designed to use ticketing data in the field of performing arts in France using a sample of platform managers and digital solution professionals. He shows how multiple the nature of the data generated by ticketing platforms and services is, as well as its sources, its volumes, and the methods used to create value from them. This variety in strategies mainly stems from the nature of the player: indirect distribution platforms, direct distribution platforms, live entertainment companies that create their own ticketing systems, etc. This paper also discusses the challenge that the entertainment world is facing because of how direct distribution platforms have the possibility to prevent it access from its audience data. He concludes by listing ways that could be explored to allow live entertainment companies to recapture the value generated by this data. In the fourth paper of Part I, entitled "The Role of Digital Broadcasting Platforms in the Visibility and Evolution of Self-Produced Web Series," Marie-Caroline Neuvillers highlights that Web series did not emerge from the amateur field but became close to it because of the technological developments that facilitate both self-production and costless, but efficient, broadcasting solutions through digital platforms (YouTube, etc.). These platforms are now an essential link between Web series and their community of viewers. However, the platforms are not neutral, neither in terms of the business model of Web series nor on their format (especially their short duration).

Finally, Part I ends with a contribution from Françoise Paquienséguy and Miao He devoted to the new role of consumers in the digital era. In "The User As a Key Element of Platforms: Through the Lens of Alibaba," the authors analyze the role played by consumers in digital platforms and explore whether the notions of usage and user are still pertinent? From the case study on Alibaba, the authors illustrate how the role of the user changes with the digital platform, maybe even more in China than elsewhere. The user becomes the heart of the value creation, but also a trendsetter in entertainment, culture, trade, media, etc.; and ultimately, he comes to stand as the symbol of the rise of a creative class.

Part II, entitled "Digital Platforms' Ecosystem," focuses more specifically on online platforms: How they compete? How their business models are selected? How new players can emerge? In his contribution, "Associations in the Creative Industries as Operators of Digital Platforms: *Failure Factors*, with an Example from the German Book Industry in the Focus," Christoph Bläsi studies how small platforms can compete with IT giants. Focusing on the situation of the German book market in the late 2000s, he shows how the German book publishing association unsuccessfully tried to set up a domestic platform to compete with Amazon. He explains the failure factors of this experience that, by the way, unintentionally led to the very successful Tolino Alliance. Opening the black box of SMEs in the book industry, he shows that the lack of experience of running both large and technological projects and the conflicting interests and perspectives of the various individuals and firms involved are among the main failure factors.

In "The Evolution of Business Models in the Online Press: Between Creativity and Imitation," Inna Lyubareva, Fabrice Rochelandet and Jean-Michel Etienne use a sample of 100 news websites to study the evolution of the business models of the online press in France over the period 2004–2014. They show that strategic choices of news websites display a converging trend towards one of the three following models: Minimal Digital, Pure Plays, and Exploring Leaders. Moreover, they stress that mimetic behavior rather than a rational decision-making process explains this evolution. Finally, they highlight that studying the impact of certain types of business models on information quality and pluralism is promising as well as a required avenue for future research.

The third contribution of Part II, authored by Olivier Thuillas, is entitled "Public Platforms for Information Brokerage in France: An Alternative to Private Models in the Access to Cultural and Educational Content?" The author studies the role and specificities of public access digital platforms as compared to the dominant private platforms. Using case studies on three French public platforms, he shows that they present some features not shared by private platforms (e.g. neutrality, respect of rights holders, virtuous cooperation). However, conversely to private platforms, public platforms consider the development of new uses as less important than organizing a community of contributors, which hinders their growth.

Finally, in "Digitization and the Brazilian Music Market: Notes About the Rising of Digital Aggregators," Leandro Valiati and Pedro Perfeito da Silva discuss the impact of digitization on the Music Global Value Chain (GVC), focusing on the Brazilian market. They document the emergence of digital aggregators within this value chain and argue that this rising is due to a successful adaptation to the new technological paradigm and the development of new tools that allow the revealing of consumption habits and sociocultural values and the structuring of expectations from consumers as well as firms such as independent record companies and streaming platforms.