

The Legal Anatomy of Electronic Platforms: A Prior Study to Assess the Need of a Law of Platforms in the EU

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Abstract

Digital economy is nowadays a Platform economy. This pervading expansion of platforms has been triggered by their value-creating ability and trust-generation potential. The emergence and increasing popularity of disruptive models, such as sharing-based economy, crowdfunding or fintech variants, have been greatly accelerated by platform-based solutions. Platforms have also transformed social, political, public and educational contexts by providing participative and collaborative environments, creating new opportunities, facilitating the creation of communities, mobilizing resources and capital, and promoting innovation. Along with these visible social and economic disruptions, platforms are also legally disruptive. Their self-regulating power, the internal relational complexity, and the potential role of platform operators for infringement prevention and civil enforcement in a possible policy shift towards an increasing intermediaries' responsibility have triggered regulatory interest. The aim of this Paper is to examine the platform model in order to explore the legal anatomy of electronic platforms and identify the key issues to consider for possible legislative actions in respect of the same within the context of the European Union (EU) Digital Single Market. First, the analysis concludes that existing transaction-oriented rules are insufficient to fully cover all legal angles of platforms and do not capture its 'institutional dimension'. Regulations would have to define operators' obligations in relation to users' protection, transparency, prevention or private enforcement. Then, the first key regulatory issue to consider is the role that platform operator may or should play. Second, the analysis reveals that the binominal division of information society service providers is not entirely consistent with the actual role of platform operators for the purposes of the application of the specific intermediary liability rules. Thus, the adoption of a set of uniform criteria under which the platform operator might be deemed as an intermediary, and the devising of a common liability regime for platforms would be critical areas to focus regulatory attention on. Third, as the community-based architecture of platforms enables the articulation of decentralized trust-generating mechanisms (reputational feedback systems, recommender systems, rating and listing), it would be pertinent to consider the elaboration of uniform concepts regarding those decentralized reputational systems, speculate on possible common criteria in design and operation (good practices, standards), and ultimately clarify liability scenarios.

I. Platform Economy: The Role of Electronic Platforms in the Digital Economy

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Digital economy is actually nowadays a Platform economy. Electronic platforms are the dominant organizational model¹ for economic activities, social networking, and emerging businesses in today digital society. Interestingly, the emergence and increasing popularity of disruptive models, such as sharing-based economy, crowdfunding or fintech variants, have not only been made possible but greatly stimulated by platform-based organizational solutions.² Platforms have also transformed social, political, public and educational contexts offering participative and collaborative environments, creating new opportunities, facilitating the creation of communities, mobilizing resources and capital, and promoting innovation.

The prominent position held by electronic platforms in the digital economy is based on their ability to reduce uncertainties, enhance users' trust, and generate value by combining a technological and structural solution – they are closed electronic environments – and a complex legal and organizational strategy – they are contract-based architectures –.³ Platform-based models offer a flexible organizational solution to overcome problems that derive from the specific nature of digital technologies: high uncertainty, low-confidence relationships, information asymmetries, substantial transactions costs (searching, negotiating, monitoring compliance, solving disputes), and parties' identification problems.

The scaling-up presence of platforms in digital economy and their growing market power has unveiled a visible disruptive effect on varied angles. Social, economic, and legal disruptions are perceptible, or certainly expected to explode soon. Their social and economic disrupting potential is clearly observed in the transformation of social relationships, market structures, and economic paradigms induced by platform-based emerging models (sharing-driven business models, fintech variants, crowdfunding). Along with these noticeable social and economic disruptions, platform model is also proving to be legally disruptive. Their self-regulation power linked to an intense centripetal force that accelerates concentration, the critical role likely to be played by platform operators⁴ in prevention and civil enforcement, and the trust-generating capacity of platforms in a digital society have started to strongly attract an interest of regulators and

¹ T.W. Malone, 'Modelling Coordination in Organizations and Markets' 33(10) *Management Science*, 1317-1332 (1987); T.W. Malone et al, 'Electronic Markets and Electronic Hierarchies' 30(6) *Communications of the ACM*, 484-497 (1987).

² For a further analysis of the technological trigger as one of the three enablers of the current expansion of crowdfunding, T. Rodríguez de las Heras Ballel, 'El *Crowdfunding* como mecanismo alternativo de financiación de proyectos' *Revista de Derecho Empresarial*, 121-140 (2014); Id, 'Modelos jurídicos para el *Crowdfunding*. Nuevas formas de financiación colectiva de proyectos' *La Ley*, 1-4 (2013).

³ A thorough legal and business analysis of electronic platforms (e-marketplaces) in T. Rodríguez de las Heras Ballel, *El régimen jurídico de los Mercados Electrónicos Cerrados (e-marketplaces)* (Madrid: Marcial Pons, 2006).

⁴ P. Kannan et al, 'The Internet Information Market: The Emerging Role of Intermediaries', in M.J. Shaw et al eds, *Handbook on Electronic Commerce* (Heidelberg: Springer, 2000), 569-590.

supervisors. With the launch of several public consultations and the release of special reports, and the efforts made by research groups,⁵ first moves have been made at the EU level⁶ and in some national jurisdictions⁷ showing interest in platform economy.

From a legislative point of view, platforms' activity is not framed by a clear, consistent, and well-defined body of rules likely to be comprehensively labelled as a 'law of platforms'. The absence of an identifiable and all-embracing legal framework for platforms does not, however, mean that their structure, operation, and activity are unregulated. Primarily, on the one hand, platforms are in essence contract-based architectures. As such, platforms have settled in the digital market and evolved to meet new needs by adapting, articulating, and combining contractual solutions. Platforms do essentially operate under a contractual framework. Besides, on the other hand, platforms are subject to existing general rules on electronic commerce, consumer protection, data protection, intellectual property (IP) rights, or competition.⁸ These sets of rules apply tangentially

⁵ C. Busch et al, 'Research group on the Law of Digital Services. Discussion Draft of a Directive on Online Intermediary Platforms' 5(4) *EuCML Journal of European and Consumer Law*, 164-169 (2016). The Project is today a European Law Institute (ELI) Project (Model Rules on Online Intermediary Platforms) approved by the ELI Council on 7 September 2016. I have joined the ELI Project Team in 2016 and participated in the Project meetings in Krakow (January 2017) and Osnabrück (March 2017). Project Rapporteurs are Christoph Busch (University of Osnabrück); Gerhard Dannemann (Humboldt University Berlin); Hans Schulte-Nölke (Universities of Osnabrück and Nijmegen); Aneta Wiewiorowska-Domagalska (University of Osnabrück); Fryderyk Zoll (Universities of Krakow and Osnabrück). The opinions expressed in this Paper are exclusively personal views of the author and do not represent the Project Team's views.

⁶ Public consultations of the European Commission, October 2015, available at <https://tinyurl.com/yb5bk2zs> (last visited 15 June 2017). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Online Platforms and the Digital Single Market Opportunities and Challenges for Europe*, SWD(2016) 172 final, COM(2016) 288 final Brussels, 25 May 2016.

⁷ UK House of Lords Call for Evidence available at <https://tinyurl.com/pw4qkvv> (last visited 15 June 2017). In France, Conseil National du Numérique, *La neutralité des plateformes*, available at <https://tinyurl.com/yc5f9l7q> (last visited 15 June 2017), June 2014; in Germany, Monopolkommission, Competition policy, *The Challenge of Digital Markets*, Special Report no 68, *Special Report by the Monopolies Commission pursuant to Section 44(1)(4) of the Act Against Restraints on Competition*, July 2015, available at <https://tinyurl.com/ydx92jc8> (last visited 15 June 2017).

⁸ Competition scrutiny did indeed arouse the earliest attention on platforms (specifically, business to business (B2B) e-marketplaces then) of supervisors and regulators. Federal Trade Commission, *Entering the 21st Century: Competition Policy in the World of the B2B Electronic Marketplaces*, Washington, October 2000; Office of Fair Trading, *E-Commerce and Its Implications for Competition Policy*, Frontiers Economics (2000, OFT Report 308); European Commission, *E-marketplaces: New Challenges for Enterprise Policy, Competition and Standardisation*, Workshop Report, Brussels, 2001; F. Alese, 'B2B Exchanges and EC Competition Law: 2B or not 2B?' 22(8) *European Competition Law Review*, 325-330 (2001); R.B. Bell and W.F. Jr. Adkinson, 'Antitrust Issues Raised by B2B Exchanges' *Antitrust*, 15, 18-24 (2000); W. Blumenthal, 'B2B Internet Exchanges: The Antitrust Basics' *Antitrust Report*, 34-55 (2000); J. Pérez-bustamante Köster and P. Suárez Fernández, 'La aplicación del Derecho de la Competencia a las plataformas b2b' *Gaceta Jurídica de la Unión Europea y de la Competencia*, 44-59 (2001); T. Rodríguez de

though and define a patched legal framework for platforms. Therefore, platforms are not certainly unregulated but rules likely to be applied to platforms depict today a partial, tangential, fragmented, and to some extent uncertain regulatory image.

Firstly, there is not a comprehensive, general regulation on platforms. Sector-specific rules have been adopted at different levels to tackle issues arising from sectorial platforms such as regulations on crowdfunding platforms⁹ or Alternative Trading Systems¹⁰/Multilateral Negotiating Systems or Facilities,¹¹ or the most recent timid, and to some degree erratic regulatory actions on sharing-economy models.¹² Given their sector-specific nature, these rules do not embrace platforms as a whole, but solely address special features of those

las Heras Ballel, 'E-marketplaces: la competencia entre mercados' *Gaceta Jurídica de la Unión Europea y de la Competencia*, 53-64 (2003); E. Vollebregt, 'E-Hubs, Syndication and Competition Concerns' *European Competition Law Review*, 437-443 (2000).

⁹ Austrian Federal Act on alternative means of financing (Alternative Financing Act- *Alternativfinanzierungsgesetz, AltFG*) – Obligations for issuing bodies as well as operators of internet platforms ('crowdfunding') regarding the financing of terrorism; French décret 16 September 2014 no 1053, *relatif au financement participatif*; German *Kleinanlegerschutzgesetz*; Italian Delibera Consob 26 giugno 2013 no 18592, *Regolamento sulla raccolta di capitali di rischio da parte di start-up innovative tramite portali on-line*; Portuguese Lei 24 Agosto 2015 no 102, *Regime jurídico do financiamento colaborativo*; Spanish Business Finance Promotion Act, *Ley 5/2015 de Fomento de la Financiación Empresarial*; United States Capital Raising Online While Deterring Fraud and Unethical Non-Disclosure Act of 2012, Pub. L. 112-106, Title III, 126 Stat. 318 (US Crowdfunding Act).

¹⁰ J.R. Macey and M. O'Hara, 'Regulating Exchanges and Alternative Trading Systems: A Law and Economics Perspective' 28(1) *The Journal of Legal Studies*, 17-54 (1999); E.M. McCarroll, 'Regulation of Electronic Communications Networks: An Examination of TradePoint Financial Network's SEC Approval to Become the First Non-American Exchange to Operate in the United States' 33 *Cornell International Law Journal*, 211-262 (2000); J. Macey and H. Kanda, 'The Stock Exchange as a Firm: The Emergence of Close Substitutes for the New York and Tokyo Stock Exchanges' 75 *Cornell Law Review*, 1007-1052 (1990).

¹¹ For instance, in the European Union, Art 4(15) Markets in Financial Instruments Directive (MiFID) defined 'Multilateral trading facility (MTF)' as 'a multilateral system, operated by an investment firm or a market operator, which brings together multiple third-party buying and selling interests in financial instruments – in the system and in accordance with non-discretionary rules – in a way that results in a contract in accordance with the provisions of Title II'. Today, relevant rules in MiFID II and Markets in Financial Instruments Regulation (MiFIR) – *Directive (EU) 2016/1034; Regulation (EU) 2016/1033, Regulation (EU) No 596/2014 and Regulation (EU) No 909/2014*.

¹² A patchwork of national or even local regulatory responses may stall the development of the collaborative economy in Europe, in absence of a common framework, and, as a consequence, impede the full reaping of potential benefits for consumers, innovation and growth. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A European agenda for the collaborative economy*, SWD(2016) 184 final, Brussels, 2 June 2016 COM(2016) 356 final. The discouraging effect of a fragmented regulatory environment within the EU is aggravated, besides, in Europe, unlike the United States (US), by cultural and linguistic disparities among Member States, European Parliament, Directorate General for Internal Policies, Author: G. Smorto, *Critical assessment of European Agenda for the collaborative economy. In-depth analysis*, IP/A/IMCO /2016-10, 9 (2017), available at <https://tinyurl.com/24a8cwb> (last visited 15 June 2017).

platforms falling within their scope of application and for the purposes of protecting certain interests, including market stability, transparency, investors' interests, prevention of systemic risk, consumer rights, tax collection, prevention of fraud.

Secondly, the existing rules on e-commerce are essentially transaction-oriented – United Nations Commission on International Trade Law (UNCITRAL)-texts-inspired legislation regulating the use of electronic communications in negotiation and contracting¹³ – or, less frequently, operator-oriented – EU Directive on electronic commerce¹⁴ setting out a legal regime for information society service providers (ISP) –. These approaches do only deal tangentially with platform-related issues, insofar as they have been framed, constructed, and applied from a transactional perspective. An 'institutional approach' to platforms is missing in these first-generation norms on electronic commerce.¹⁵ Considering platforms as institutions may be an enticing and challenging approach.

Thirdly, rules likely to anyhow tackle issues related to platforms' structure, operation or activity are, as a result, scattered and distributed in a variety of legal acts, at different levels, and with very diverse scopes. Not surprisingly, that offers a fragmented image of a legal framework with a low degree of harmonization.

Finally, and more importantly, the legal regime applying to platforms is to a great extent uncertain. Precisely, it is questionable whether platform operators are genuine intermediaries for the purposes of the specific intermediary liability regime and, if so, under which conditions, to which extent, and in which cases.¹⁶

¹³ UNCITRAL *Model Law on Electronic Commerce* 1996 (with Guide to Enactment), <https://tinyurl.com/y7n4ydfw> (last visited 15 June 2017); UNCITRAL *Model Law on Electronic Signatures* 2001 <https://tinyurl.com/l7z8xh9> (last visited 15 June 2017); *United Nations Convention on the Use of Electronic Communications in International Commerce* approved by General Assembly Resolution 60/21, of 23 November 2005 (www.uncitral.org) (last visited 15 June 2017).

¹⁴ Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (*Directive on electronic commerce*).

¹⁵ The necessary change of focus from transaction-oriented rules to a platform-oriented approach as described in this Paper is shared by C. Busch, H. Schulte-Nölke, A. Wiewiorowska-Domagalska and F. Zoll in 'The Rise of the Platform Economy: A New Challenge for EU Consumer Law?' *EuCML Journal of European and Consumer Law*, 3-10 (2016), who explain the problem from the perspective of the transaction configuration: *from 'bipolar' to 'triangular' relationships*, 4.

¹⁶ As far as the legal framework for the provision of online services is concerned, electronic platform operators can be deemed intermediary service providers (ISP) in relation to contents, activities and behaviours published, transmitted or performed by their users. Accordingly, the 'safe harbour' regime would be applicable to restrict their liability – Arts 12-15 Directive on Electronic Commerce with direct antecedents in the US legal model divided into the *Communications Decency Act* of 1996 included as Part V of *Telecommunications Act* (Pub. L. 104-104, 110 Stat. 56 (codified at 47 U.S.C. 230) and the *Digital Millennium Copyright Act*, Pub. L. No. 105-304, 112 Stat 2860 (28 October 1998) (codified at 17 U.S.C. 512) –. The European Court of Justice confirmed that assertion when expressly held in European Court of Justice (ECJ), C-324/09 *L'Oréal SA and Others v eBay International AG and Others*, Judgment of 12

Within the traditional division under electronic commerce rules between service providers (information society service providers) and intermediaries (intermediary service providers), platform operators do not fit smoothly. Frictions arise, as platform operators seem to be placed in a grey area not properly covered by the above-described binomial categorization.

Likewise, the blurred lines of the legal conceptualization of platforms within the current regulatory environment are even more eroded by the international policy debate on the role that platforms and intermediaries are likely to play in the present digital economy and the discussion on the need for recalibrating the safe harbour for electronic intermediaries. That policy approach might lead to consider a (general or infringement-specific) narrowing of the intermediaries' liability framework¹⁷ and propose a 'fit for purpose' regulatory action for platforms and intermediaries.¹⁸ Even if the EU seems to endorse the current intermediary liability regime,¹⁹ the implementation of sectorial, problem-driven actions and the encouraging of self-regulatory efforts by platforms appear to deploy a policy shift from intermediary liability to intermediary responsibility. Under the resultant policy, special emphasis will be given to the promotion of voluntary measures from intermediaries to prevent illegal activities and content.

Against such background, an interest in considering the need for a legislative response to the evolution of platforms, albeit still partial and limited to certain jurisdictions, is visible and growing. The convenience of adopting specific rules on platforms at a general level is at present being considered by the European Union,²⁰ and other domestic jurisdictions with the aim to either updating, modernizing or simply expanding the scope of their electronic commerce laws, or formulating an entirely bespoke regimen instead. Nonetheless, any regulatory

July 2011, available at <https://tinyurl.com/y8jprlah>: 'Article 14(1) of Directive 2000/31/EC of the European Parliament and of the Council of 8 June 2000 on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market ("Directive on electronic commerce") must be interpreted as applying to the operator of an online marketplace where that operator has not played an active role allowing it to have knowledge or control of the data stored'.

However, case law is not well-established, decisions are not consistent, and, more importantly, concepts and rules are not uniform and there are no clear standards to assess when the operator is playing an active role.

¹⁷ G.F. Frosio, 'Reforming Intermediary Liability in the Platform Economy: A European Digital Single Market Strategy', available at <https://tinyurl.com/yaep4byu> (last visited 15 June 2017).

¹⁸ European Commission, Communication 6 May 2015 on *A Digital Single Market Strategy for Europe*, COM(2015) 192 final, at § 3.3.

¹⁹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 25 May 2016 on *Online Platforms and the Digital Single Market Opportunities and Challenges for Europe*, SWD(2016) 172 final, COM(2016) 288 final.

²⁰ *Online Platforms and the Digital Single Market Opportunities and Challenges for Europe* n 19 above, 9. W. Maxwell and T. Pénard, *Regulating Digital Platforms in Europe – A White Paper*, December 2015, available at <https://tinyurl.com/y7bne9jc> (last visited 15 June 2017).

action on platforms, if considered, should be preceded by a prior understanding of the platform ecosystem and the existing rules regulating the constellation of business models comprised by the platform economy.

Should regulatory initiatives be undertaken, it is also critical to emphasize that a number of regulatory actions, likely to lead to diverging outcomes, is not consistent with the natural cross-border nature, or more precisely a-nationality, of activities of and within electronic platforms. More importantly, a multi-jurisdiction regulatory approach is frontally colliding with the rationale behind the emergence of electronic platforms: to create self-regulated environments, to the maximum possible extent, self-sufficient and separate from domestic jurisdictions. As global digital economy is growing on the basis of platform-based models, disparities in approach, or in regulation raise obstacles to international trade, arouse uncertainties, increase risks in electronic commerce transactions conducted, indeed, through online platforms, and obstacle the flourishing of innovative and disruptive business models. In absence of a harmonized framework for electronic platforms, case law and legal rules at domestic/regional level differ. As a consequence, not only cross-border activities and electronic transactions are discouraged, but, above all, efficiencies deriving from and opportunities associated to the resort to electronic platforms are missed and the trust-creating potential of electronic platforms is seriously undermined.

Electronic platforms are a key element in the trust-creating policies for digital economy. A common legal framework for platforms would infuse more predictability in digital activities, reduce the likeliness of jurisdiction arbitrage, catalyse the development of emerging models, and better prepare the international legal system for the coming of new disruptive technologies (including, among others, block chain and distributed ledger).

Any possible regulatory response resulting from these prior assessments and consultation processes should carefully define policy decisions, be based on a cost-analysis evaluation,²¹ effectively manage the territoriality factor, and previously understand the anatomy of electronic platforms. As per Organisation for Economic Co-operation and Development (OECD)²² and European Commission principles of good regulation²³ a prior full analysis of the market that is the object of regulation, and whether existing law can be used to address the problem is imperative. Regulatory responses must be technological-neutral and adaptive to business models' evolution.²⁴

²¹ A. Strowel, 'Vers une regulation des plates-formes internet?' *Journal de droit européen*, 220, 225 (2015).

²² OECD, *Recommendation of the OECD Council on Principles for Internet Policy Making*, December 2011, available at <https://tinyurl.com/y7xalzng> (last visited 15 June 2017).

²³ European Commission, Staff Working Document, 'Better Regulation Guidelines' and 'Better Regulation Toolbox', SWD (2015) final, 19 May 2015, available at <https://tinyurl.com/ydhqgea6> (last visited 15 June 2017).

²⁴ W. Maxwell and T. Pénard, *Regulating Digital Platforms in Europe* n 20 above.

The aim of this Paper is to X-ray platform model in order to trace the legal anatomy of electronic platforms. This prior study is aimed at unveiling the personal, relational, governance and structural angles that should be integrated in the discussion on the need for a legal framework for platforms, in the process of drawing the scope of a future regulation and developing specific solutions, and in the assessment of risks and benefits.

Considering the above-anticipated aims, the Paper is structured as follows. Part II tackles the complexity of framing a legal concept of platform and proposes three alternative approaches to delimit the scope of application of a future regulation on platforms. Part III provides a succinct efficiency assessment on platforms as closed electronic environments to understand its extraordinary proliferation and its popularity as dominant organizational models in digital society. Part IV describes how platforms operate and separates platforms into their personal and relational components that articulates their legal anatomy. Part V summarizes possible angles of a regulation on electronic platforms.

II. Defining a Legal Concept of Platform and Delimiting Possible Scopes of the Law of Platforms

1. Proposal for a Legal Description of Platforms

The concept of platform is well-described in technological terms and widely understood as a business model. However, the formulation of a legal concept of platform needs to embrace a complex structure involving a range of actors and a bundle of relationships. Consultations and reports on platforms produced to date offer a wide range of definitions differing in formulation and, in some measure, in taxonomy of models comprised thereby.²⁵ Nonetheless, it seems that several common features can be inferred from the catalogue of definitions. Firstly, they are based on the economic theory of multi-sided markets.²⁶ Secondly, they stress the role of platforms as facilitators or enablers and value creators. Thirdly, the intermediary function of the platform operator is highlighted, albeit undefined in legal terms. Under these features,

‘online advertising platforms, marketplaces, search engines, social media and creative content outlets, application distribution platforms, communications

²⁵ See Public consultations of the European Commission, October 2015, available at <https://tinyurl.com/ybmrjkee> (last visited 15 June 2017); Commission Staff Working Document, *A Digital Single Market for Europe: Analysis and Evidence*, SWD(2015) 100, 53, available at <https://tinyurl.com/y87onvld> (last visited 15 June 2017); UK House of Lords, Select Committee on European Union, 10th Report of Session 2015-16, *Online Platforms and the Digital Single Market*, HL Paper 129, available at <https://tinyurl.com/y9yo3cgu> (last visited 15 June 2017).

²⁶ Literature on two-sided (or multi-sided) markets, D.S. Evans, *Platform Economics: Essays on Multi-Sided Businesses* (Competition Policy International: 2011); J.C. Rochet and J. Tirole, ‘Two-Sided Markets: A Progress Report’ *Rand Journal of Economics*, 645-667 (2006).

services, payment systems, and platforms for the collaborative economy'²⁷

would be potentially covered by the definition of platform. From this perspective, it is my understanding that definitions may result for regulatory purposes too wide-ranging, and in practice rather vague to serve as a legal basis for devising a regulatory framework.

My proposal is then to incorporate in the legal definition of platforms a most clear distinctive legal element likely to differentiate platforms from other existing service providers, and to justify the need of a singular regulatory approach beyond the current legal regime for information society services. Under this premise,²⁸ I would suggest a more limited conceptualization of platforms for the purposes of framing a specific legal regime. Such a limiting approach is needed to avoid an undesired overlapping with existing regimes or a confusing double-characterization of providers resulting from a too extensive definition of platforms. To that end, I propose below a definition of platforms based on the isolation of their main components: participants and relations.

Platforms are run by operators whose main business activity is precisely to create, manage, regulate, and supervise (under the conditions and with the extent that the obligations laid down in the membership agreements state, as further explained below) a digital environment that enable users, depending of the type of platform, to interact, negotiate, conclude and perform transactions, or carry out other activities within and in relation to the relevant community. Therefore, the existence of a platform is based on the activity of an operator and a community of users. The identification of these two personal dimensions is crucial to frame a concept distinctive enough from other service-providing business models.

For the purposes of depicting a legal paradigm of platforms, it is essential to understand which relationships are established between the operator and the users and how this plurality of actors interact each other. To that end, two relational dimensions have to be explained: a vertical dimension and a horizontal one. Under the vertical dimension, the operator and each user enters into an agreement (membership agreement). This agreement sets out rights and obligations of the parties: the operator (as service provider, regulator, supervisor) and the user as a member of the platform (registered user). By virtue of the vertical agreement, the operator defines, delimits the extent, and sets out the conditions regulating its role as a service provider (supplying comparison services, recommender systems, rating facilities, payment services, insurance, aggregating activities); as a (contractual) regulator (adopting rules for the platform); as a

²⁷ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 25 May 2016 on *Online Platforms and the Digital Single Market Opportunities and Challenges for Europe*, SWD(2016) 172 final, COM(2016) 288 final, 2.

²⁸ A theory that is already inspiring and guiding my analytical work at T. Rodríguez de las Heras Ballel, *El régimen jurídico de los Mercados Electrónicos Cerrados* n 3 above.

supervisor (monitoring users' activity and applying the Infringement and Penalty Policy); and/or even as a mediator or dispute resolution facilitator. Such a contractual framework shapes the platform business model, articulates governance standards and deploys strategy. Hence, as further explained below, platforms may, to better deploy the business strategy, decide to decentralize regulation activities getting users involved in, facilitate user-driven reputation system, implement decentralized supervision mechanisms (report system, take-down system, complaint mechanisms), or opt for user-led models in any of the dimension of the platform.

Under the horizontal dimension, users interact each other to exchange information (digital contents, reviews, opinion, ratings), negotiate, provide services or conclude transactions of any nature within the platform and in accordance with the internal policies (code of conducts, rules book, market rules, negotiation policy, community rules). Users commit to abide by these internal policies, anytime in force, as per the membership agreement. Interaction among users within the platform is a conspicuous distinctive feature distinguishing platforms from other third party service-provision schemes. It is my impression that some platform-like models, such as music platforms, search engines, or app stores, might not be adequately qualified as platforms in legal terms, albeit clearly operating as platforms from a technological standpoint, and for the sole purposes of regulation, insofar as they might be sufficiently regulated by the existing rules on information society services, intermediary services and even agency and distribution activities. The extension of prospective rules on platforms to the above described models, if it is nonetheless deemed appropriate, should be at least considered carefully to avoid an overlapping of regimes or an unjustified deviation from the existing legal framework.

The two-tiered architecture of platforms reveals that, at a general rule, platform operators and platform users carry out different activities. In fact, the operator is engaged in managing and operating the platform and providing the services due as per the membership agreement; whereas platform users may carry out a variety of activities either for business purposes or for personal, family or household ones, depending upon the platform variant that one takes into account. Thus, in a social network, the operator provides a venue for users to socially interact and exchange information; in an electronic marketplace, the operator manages (and usually regulates, monitors and supervises) an environment enabling users to negotiate and conclude transactions; or, finally, in an equity crowdfunding platform, the operator facilitates the publication of projects and crowdfunding campaigns and provides a market-like environment for fundraising. In all these hypotheticals, the operator is not undertaking the activity that users are expected to carry out. Should this premise be accepted, any regulatory action affecting platforms ought to consider the need of taking as a general rule this initial (and presumed, unless otherwise proved by the real functioning of the

platform) division of activities.

Therefore, the operator is always (as a general rule) engaged in a commercial activity, whereas users' activities can, depending upon the characteristics of the platform, be for commercial purposes or non-commercial ones. Then, users can operate as traders or consumers, as suppliers or customers, in business to business (B2B), business to consumer (B2C) or peer to peer (P2P) transactions,²⁹ or even alternate their positions. Certainly, business models range along a great variety of possibilities. Besides, some platform operators, in addition to their main role, run other services and may act as providers, supplying digital contents, goods or services to users; or supply added-value services relating to users' transactions (logistics, insurance services, payment services, rating). In that regard, and in relation specifically to these activities, operators would be acting, as well, as service providers or traders and be subject to the applicable rules accordingly (ie if Amazon provide transportation services or if it also offers and sells, in its own name, products to users as a genuine trader). Between the above-described pure models under which the operator acts either as a mere facilitator of users' interaction, or a genuine and direct supplier, a broad range of hybrid models exist in the market. With different levels of control or influence by the operator over users,³⁰ a plethora of platform models operate in the digital world. How influence should be assessed and which conditions are to be met in order to qualify the operator as a provider of users' activity or to declare anyways its liability are questions that require attention and a harmonized treatment. Therefore, a prior analysis of the business model machinery is critical and revealing.

A proper empirical understanding of platform-based business models does also lead to conclude that, under the standard platform model, the operator is not acting as a genuine intermediary in the legal conception (commercial agent, representative, distributor). As a matter of fact, the operator is acting neither as an agent or a distributor, nor as a representative in name and/or on behalf of the users. On the contrary, the activity of the operator consists in making available a venue for users to interact, negotiate and conclude transactions without any intervention of the operator. In business models adopting this 'no-legal-intermediation' approach, the operator's obligations are limited to creating the digital market or community (software, safety measures), enabling communication (information exchange and communication facilities), providing hosting services for users to publish contents, offering interfaces and functionalities for negotiation and contracting, offering added-value services (searching, comparison, rating, feedback, complaint handling, reputation systems), and, if agreed, implementing monitoring mechanisms and dispute resolution systems. Nevertheless, the

²⁹ Collaborative economy challenges the classical conceptualization of trader and consumer, G. Smorto, *Critical assessment of European Agenda for the collaborative economy* n 12 above.

³⁰ *ibid.*

operator does not intend to act on behalf of any of the parties in the negotiation, the conclusion, or even the performance of the prospective transactions.

Certainly, the previous assumptions based on the prevailing market benchmark does not mean that the operator will never be a commercial intermediary. The business model will define the real role of the operator that could be, in light of the contractual structure, the technological architecture, and the reasonable expectations of users generated by the operator's actions, of a genuine intermediary. These remarks open another interesting perspective for a future regulation, as it might be decided to allocate on the operator the liability that users reasonably rely on its acting as a genuine intermediary (agent or distributor) or even as the supplier, if this role is not properly disclosed or its behaviour is confusing and misleading.

Departing from this clear understanding of the two-dimension feature is absolutely critical to properly shape a prospective regulation on platforms. A disregard of this distinctive structural element may lead to focus incorrectly any regulatory action on platform. To a certain extent, the controversy aroused by some regulatory proposals on sharing-economy models is rooted in a misconception of the role of the platform operators and an unfocused analysis of platform architecture. A thorough and deep study of each business model would unveil the real structure of the platform and the genuine functions of the operator. Within the broad and multiform ecosystem of sharing-economy models, different strategical options can be found. Suitable regulatory responses are expected accordingly.

2. Regulatory Options for Delimiting the Scope of Application

The immediate consequence of the two-tiered structure in the outlining of the sphere of application of a prospective regulation appears now evident. Upon defining the regulatory options for a prospective legislative action on platforms, it must be decided whether rules would be covering all types of platforms regardless of the nature of the activities or only certain kinds of platforms instead.

Should regulatory attention be addressed to the role of the operator, the business-activity element is consubstantial, as platform operators do conduct business, either directly remunerated by fees paid by users, or indirectly financed by advertisement, added-value services or other possible revenue strategies. Notwithstanding, the sphere of application might be narrowed depending on the activity carried out by users. From that perspective, regulators may decide to exclude platforms for non-commercial purposes or for B2B transactions or on the basis of any other factor relating to the horizontal dimension of the platform (users' community). More interestingly, regulation might be articulated on a modular basis providing for sequential layers of rules for the different types of platforms in terms of users' purposes and activity.

Under the above-described modular approach, for instance, rules on

comparison systems or reputational mechanisms could apply to the whole range of platforms regardless of users' purposes and activity from social networks to electronic marketplaces that offer these facilities. On the contrary, specific rules relating to non-performance and liability would be applicable solely to those platforms enabling the execution of transactions.

Given the complex, multi-party and two-dimension structure supporting the creation and functioning of the platform, any attempt to develop a legal framework for platforms requires a prior policy decision on the relevant scope. To my mind, possible rules on platforms may adopt three possible policy approaches that may coexist and be combined though.

First, an operator-based approach. This personal approach would align with the EU regulatory option on information society service providers (hereinafter, Internet service providers or ISP). Platform operators would be defined as a service provider within the general concept of ISP, as an intermediary service provider, as per the EU Directive on Electronic Commerce, or as an entirely new category. Accordingly, rules on platforms would be focused on framing a legal regime for these providers through establishing general requirements, obligations and, if so decided, specific liability rules.

Secondly, a service-based approach. Under this approach, the regulatory aim would be to subject services provided by platform operators to a set of rules. At a first stage, 'platform services' should be clearly described and duly differentiated from digital services that are already covered by the existing EU legislation on electronic commerce. After the description of the services falling under the scope of application, rules on the provisions of such services (limitations, service conditions, standards) would be laid down.

Thirdly, a platform-based approach. This 'institutional approach' is very suggestive in theoretical terms as it achieves to offer an all-embracing understanding to platform as a new institution, a hybrid between markets and hierarchies.³¹ Nonetheless, it would for sure complicate the legislative formulation and the drafting exercise, since it might be more difficult to demarcate the scope on an 'institutional' basis and outline clear and well-defined rules.

Yet, the three approaches above offer alternative paths for the legislative process to take, with different consequences in terms of drafting and, probably, of legal technique quality. Nevertheless, if policy options are well defined, a wise application of any of the said drafting approaches can result in a clear, predictable,

³¹ O.E. Williamson, 'Comparative Economic Organization: The Analysis of Discrete Structural Alternatives' 34 *Administrative Science Quarterly*, 269-295 (1991); W.W. Powell, 'Hybrid Organizational Arrangements: New Form or Transitional Development?' 30 *California Management Review*, 67-87 (1987); J. Child, 'Information Technology, Organization, and the Response to Strategic Challenges' 30 *California Management Review*, 33-50 (1987); W.G. Ouchi, 'Markets, Bureaucracies, and Clans' 25 *Administrative Science Quarterly*, 129-141 (1989); C.U. Ciborra, 'The Platform Organization: Recombining Strategies, Structures, and Surprises' 7(2) *Organization Science*, 103-118 (1996).

and effective regulatory action.

III. Understanding Platforms as Closed Electronic Environments: An Efficiency Assessment

Electronic platforms, in all their variants (e-marketplaces, sharing-based platforms, business communities, social networks, crowdfunding platforms) are and operate as closed electronic environments. The closed nature of an environment does not depend on a specific technology, the use of certain communication technique or the level of security that may indeed be high as it is in open environments. The difference between an open environment and a closed one is essentially based on a legal factor. As mention above, the closed nature of an environment is achieved by the use of a contractual infrastructure that creates a contract-based trustworthy context for users that is self-contained, self-regulated, and, to the maximum possible legal extent, independent from domestic jurisdictions. Hence, an electronic platform, as a closed environment, is built by a set of agreements between the operator and the users' community. In the absence of specific legal rules, obligations and rights of platform operators are laid down by the contractual terms and conditions entered into by the operator and every user, and, consequently, the role to be actually performed by operators is determined by the set of contracts behind the functioning of the platform.

The ultimate aim of a closed environment is in fact to generate trust in an uncertain playing field. Trust means predictability, reduction of uncertainties, and risk minimization. Electronic platforms have pervaded the digital economy on the assumption of an efficiency hypothesis³² – 'Electronic Markets Hypothesis' –: cost reduction, transparency enhancement, integration and syndication opportunities³³ and trust generation.

Digital economy landscape is today essentially platform-based, as platforms infuse a number of efficiencies in the organization of digital activities compared to open electronic structures. These economic benefits, certainties and advantages may be more visible or intense in certain modalities, mainly for commercial purposes, where platforms exert a powerful attracting force over commercial dealings and retains business value. Certainly, platforms in certain sectors may

³² Electronic platforms, in all their business variants (e-marketplaces, B2B sharing-based platforms, business communities), exploit the efficiencies that derive from the three main effects described by the 'Electronic Markets Hypothesis' (T.W. Malone et al, n 1 above) – *electronic communications effect, electronic brokerage effect and electronic integration effect*.

³³ M. Bichler, *The Future of e-Markets. Multidimensional Market Mechanisms* (Cambridge: Cambridge University Press, 2001); A.B. Sculley and W.W. Woods, *B2B exchanges. The Killer Application in the Business-to-Business Internet Revolution* (New York: Harper Business, 2001); E. Vollebregt, 'E-Hubs, Syndication and Competition Concerns' *European Competition Law Review*, 437-443 (2000).

be, however, unable to repair all market failures or even generate new malfunctions or imperfections.³⁴ This uneven distribution of efficiencies could suggest a different regulatory approach on sector-specific basis.

Precisely, any electronic marketplace, either for B2B, B2C, or even P2P transactions, do convincingly illustrate the efficiency assessment. Suppliers and customers register in the platform and start exploiting all efficiencies of a supervised-and-managed self-regulated market. Firstly, joining the platform ensures visibility of own products and availability of prospective counterparties' offers and interests. Secondly, transaction costs (searching, inspecting, selecting counterparties, monitoring compliance, drafting contracts) reduce dramatically. Thirdly, the platform operator provides a set of added-value services: inspection services, logistic services, payment services or financing options. Out of the platform, suppliers and customers would have to search potential counterparties interested in dealing, assessing accuracy of openly published offers and trustworthiness of players willing to deal, negotiating conditions in each case, checking conformity of goods, implementing measures aimed to counteract risks of non-compliance, monitoring compliance and covering business risks.

On the contrary, dealings in open environments requires facing all uncertainties and challenges arising from the digital scenario: delocalization, virality, identity uncertainty, massive damages, or, among others, irrelevance of connecting factors to determine with the proper jurisdiction or the applicable legislation. Whereas open environments are reasonably suitable for isolated commercial transactions and are still commonplace for many digital activities and transactions, closed environments provide an optimum atmosphere for the building and development of long-term business relationships, social communities of any kind, sharing economy, trust-based relations, or alternative finance methods, on a stable basis.

a) *Cost reduction*. One of the most visible efficiency resulting from migrating business activities to digital markets is the dramatic reduction of costs. All costs involved in the process of contracting, labelled as transaction costs, are to any extent reduced or even radically minimized by virtues of the operation of an electronic platform: searching costs, negotiating costs, contracting costs, monitoring costs, costs of maverick purchasing, switching costs, communication costs or enforcing costs.

b) *Transparency enhancement*. In economic terms, transparency denotes the ability of a market to disclose and provide relevant information. In contexts dominated by information asymmetries, higher the transparency factor is, lower the cost to get relevant information market players have to incur in. Electronic platforms centralize, efficiently process and readily disclose information

³⁴ In relation to sharing-economy platforms, it is argued that market failures as externalities or anticompetitive behaviors may not be satisfactorily addressed by platforms, G. Smorto, *Critical assessment of European Agenda for the collaborative economy* n 12 above, 22.

among users.

c) *Integration and syndication*. Electronic platforms for business transactions drive both intra-corporate integration projects and multi-corporation integration ones.³⁵ At the intra-corporation level, upon admission by the platform operator, market users immediately proceed to redesign internal processes aiming to rationalize management and procurement, improve stock control and optimize purchase chain. At the multi-corporation level, the opportunity to design a fully integrated market facilitates the access to new markets, alleviates the need of traditional intermediaries and reduces their additional costs, and promotes 'customization'. Interestingly, integration projects are meant to enable the implementation of 'just in time' and 'quick response' strategies as well. In parallel with that, integration opportunities lead to the development of syndication models. Market relationships veer from bilateral-lineal-chained relations between players to more sophisticated multilateral-networked-dynamic schemes within the electronic platform. Despite the emergence of competition risks, syndication fortifies bargaining power of less strong market players and, in particular, benefits small and medium enterprises (SMEs).

d) *Uncertainties minimization/Trust generation*. From a legal point of view, the most fascinating effect of an electronic platform is the creation of a contract-based trusted environment. Precisely, the centralized, supervised and self-regulated market supported by the electronic platform implies a dramatic reduction of uncertainties. In the undertaking of supervising, regulating and monitoring tasks, the platform operator is imbuing the market with trust, certainty and predictability.

The huge contribution of platforms to competitiveness in digital economy, the potential to enhance consumer welfare and create value, and the key role as a driving force for more participative, inclusive, and innovative societies have been clearly perceived and acknowledged by the EU. Accordingly, in the Digital Single Market strategy, setting an environment likely to retain and foster the emergence of electronic platforms in Europe is a crucial challenge and a key opportunity.³⁶ Therefore, in order to reap the full benefits from the platform economy and stimulate the growth and expansion of platforms market, a prospective regulatory environment should ensure and promote a sustainable development and scaling-up of the platform business model in Europe, a level playing field for a competitive market, and an effective enforcement of rules.

³⁵ T.W. Malone, J. Yates and R.I. Benjamin, 'The Logic of Electronic Markets' *Harvard Business Review*, 166-170 (1989).

³⁶ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 25 May 2016 on *Online Platforms and the Digital Single Market Opportunities and Challenges for Europe*, SWD(2016) 172 final, COM(2016) 288 final.

IV. Inside a Platform: Parties and Contractual Relationships in an Electronic Platform

As previously described, platforms are two-tiered multi-party models organized in two layers. On the one hand, the platform operator who manages the platform. On the other hand, the community of users. These are indeed the two vectors explaining why the existing transaction-oriented approach is neither sufficient nor adequate. Precisely, platform-oriented rules should acknowledge and duly deal with the complexity of the structure, the plurality of users, the sense of community, and the relevant roles of the operator in regulating, supervising, enforcing and generating trust within the platform.

1. The Platform Operator

Electronic platforms are self-regulated communities managed by a platform operator. Despite that, some functions can be designed and implemented to operate on a decentralized basis, as further explained below, platforms are essentially centralized structures. The role of the platform operator is crucial to create and maintain a predictable, reliable and trustworthy playing field. The scope and the extent of operator's functions are determined in each case by the membership agreement. When joining the platform, every user enters into an agreement with the operator. This is the membership agreement. Subsequently, registered users negotiate and enter into contracts according to the relevant internal policies (platform rules).

Rarely, the operator is an individual (sole trader) or natural person. More frequently, the operator adopts any of the organizational forms, available in the jurisdiction where it is located, to run a business (corporations, incorporate joint-ventures, private companies, but also associations, cooperatives or partnerships). Interestingly, those organizational forms entailing a distinct and separate legal personality are preferred. Likewise, commercial companies and corporations are the most common solution.

Platform's users can anyhow participate in the operator as members or managers. There is no legal reason to dispute this point. Nevertheless, some concerns on the neutrality of the operator and its ability to perform its functions on an independent basis may arise. As a matter of fact, should some (or all) users become members of the operator (partners or shareholders), the neutrality of its decisions as a regulator or as a supervisor in relation to the same users may be questioned and its attractiveness in the market may be reduced accordingly. Therefore, the structure of the operator has to be very carefully considered.

a) The Platform as an Intermediary: The Theory of the Digital Reintermediation Cycle

According to economic theories on intermediation, electronic platform

operators clearly perform intermediaries' typical functions. Traditionally, intermediaries aim to solve market failures. Information asymmetries aggravate failures in digital markets. Therefore, intermediaries take on the challenges to facilitate interaction, enable matching, reduce cost, reduce the number and the complexity of relationships ('Baligh-Richartz effect'),³⁷ and enhance confidence exploiting reputational factors to minimize opportunistic behaviours and externalities.

The economic theory of intermediation introduces a functional perspective in the more formalistic legal concept of intermediary service provider. From a harmonious combination, it is my belief³⁸ that a new understanding of electronic intermediation can be advocated. Far from the initial contention that digital technology would trigger an intense and definitive disintermediation process,³⁹ a growing reintermediation process is actually explaining the state and the evolution of digital society instead. Intermediaries are still needed.⁴⁰ The intermediation cycle turns then from a disintermediation phase to an appealing reintermediation phase.⁴¹

Whereas disintermediation describes the removal of middlemen from processes, chains and markets, reintermediation entails not only the reversion of such a trend but also the emergence of new areas where intermediation creates value. The reintermediation process is then a complex and multi-faced phenomenon intended to mitigate failures, create value and satisfy social and business needs as presented in the digital environment. As far as electronic relationships are becoming more closely intertwined and products and services more sophisticated, intermediation needs have been evolving in the digital environment and intermediation profiles have been reshaped and framed accordingly. Changes in the management and the structure of the distribution chain are probably rather evident and easily perceptible. Digital technology forces manufacturers and retailers to make innovations in distribution, such as shortening the channel, removing intermediate and unnecessary phases, approaching to clients, customizing strategies. Intermediaries have managed to recover their roles in the chain, moving backwards and forwards along the distribution channel and learning to provide added-value services to users

³⁷ H.H. Baligh and L.E. Richartz, *Vertical Market Structures* (Boston: Allyn and Bacon, 1967).

³⁸ T. Rodríguez de las Heras Balle, 'El tercero de confianza en el suministro de información. Propuesta de un modelo contractual para la sociedad de la información' *Anuario de Derecho Civil*, 1245-1284 (2010); and 'Intermediación electrónica y generación de confianza en la Red: escenarios de riesgos y responsabilidad' *Revista Española de Seguros*, 43-68 (2013).

³⁹ R.I. Benjamin and R. Wigand, 'Electronic Markets and Virtual Value Chains on the Information Highway' *Sloan Management Review*, 62-72 (1995).

⁴⁰ E. Brousseau, and T. Pénard, 'The Economics of Digital Business Models: A Framework for Analyzing the Economics of Platforms' *Review of Network Economics*, 81-114 (2007).

⁴¹ A.M. Chircu and R.J. Kauffman, 'Strategies for Internet Middlemen in the Intermediation /Disintermediation/Reintermediation Cycle' *Electronic Markets*, 109-117 (1999).

(recommender systems,⁴² botshops, comparison tools). Notwithstanding the foregoing, it is our contention that the reintermediation wave overflows the case of electronic intermediation in the distribution channel to provide intermediation services in a range of significant areas, in an appealing process less perceptible but crucial for the functioning of the digital economy.

The proliferation of platform business models decisively illustrates the reintermediation cycle in a variety of sectors and activities. Platforms do functionally act as intermediaries and penetrate the market to reintermediate social and business activities. However, from a legal perspective, this functional profile does lead neither to embed platform operators into the electronic intermediaries' category nor to include platform operators' activities within the classical intermediary services (agency, distribution, commission), as previously explained.

b) The Role of Platform Operator: Service Provider, Regulator, Supervisor

In managing the platform, the operator provides added-value services, adopts rules, monitors compliance and applies penalties in case of breach of internal rules by users. In sum, the operator acts as a service provider, a (contractual) regulator, and a (contractual) supervisor. Whereas the provision of services (payment management, insurance, inspection, rating, marketing) has a visible commercial impact, increasing the appeal of the offer in the market, fostering loyalty of users, and providing additional financial support; the tasks of regulating and supervising are key for the creation and preservation of trust.

A) Provision of services. Beyond basic services supporting the electronic trading infrastructure (*software*, security measures, information exchange), the operator may enhance the commercial appeal of the platform by providing a various range of added-value services: payment services, rating, insurance, search and comparison, reputation system, certification, inspection, or logistic services. The provision of added-value services tends to increase users' loyalty (raising switching costs), impede full substitutability with competing offer, and favour integration.⁴³

B) Adoption of Platform Rules (Rulesbook). Electronic platform are self-regulated environments. As per the membership agreement, the operator is entitled to adopt rules in form of eligibility requirements to access the platform, codes of conduct, negotiation standards, model contracts, performance conditions,

⁴² J. Pazos Arias, A. Fernández Vilas and R. Díaz Redondo eds, *Recommender Systems for the Social Web* (New York: Springer, 2012).

⁴³ Y. Bakos and E. Brynjolfsson, 'Organizational Partnerships and the Virtual Corporation', in C.F. Kemerer et al eds, *Information Technology and Industrial Competitiveness: How Information Technology Shapes Competition* (New York: Springer, 1998).

infringements and penalties policies. Business models significantly differ in the structure of the regulatory scheme. Whereas more community-oriented platforms tend to articulate participative regulation models and user-driven penalty policies, business-oriented platforms do normally opt for centralized regulation and supervision models likely to generate a trustworthy and predictable context for transactions.

By accepting the membership agreement, each user takes the commitment to abide by in-force market rules and internal policies. Accordingly, whether the user fails to act in accordance to market rules and policies, the operator is entitled to claim default remedies.

Yet, infringement and penalties policy must be carefully drafted to reflect penalties in terms of contractual remedies in case of non-performance – ie exclusion from the platform as termination of the contract; or, a fine as a penalty clause –.

C) Supervision and monitoring: Infringement and Penalties Policy. As per the membership agreement, the operator is entitled (has the right, not the obligation) to monitor and supervise the compliance with the relevant rules and policies by users and to take reasonable measures accordingly. In practice, the supervision model is frequently based on a decentralized report system where users give notice to the operator when infringements are committed by other users (complaint handling mechanisms, report systems and notice and takedown systems in line with the mechanisms implemented to substantiate the ‘actual knowledge’ requirement under the ‘safe-harbour’ regime applying to intermediaries).

Such a contractual infrastructure designs the liability regime and indeed allocates duties and liabilities between operators and platform’s members.⁴⁴ Since the ‘safe harbour’ regime is based on lack of knowledge and lack of control, it can be argued that operators manage to preserve their position by a right (but not an obligation) to monitor and supervise so as to enhance confidence without exposing themselves to liability risks, or, on the contrary, if the deployment of internal monitoring systems increases as a matter of fact their risk exposure,⁴⁵ insofar as they prove the capacity to control and prevent illegal activities and content.

Hence, a prospective regulation on platforms should carefully ponder the regulatory options to adopt and implement the policy decisions. Three main

⁴⁴ T. Rodríguez de las Heras Ballel, ‘La responsabilidad de las plataformas: Alcance, límites y estrategias’, in L. Cazorla and E. Moreno eds, *Crowdfunding: Aspectos Legales* (Madrid: Aranzadi, 2016), 369-393.

⁴⁵ Or even if, as proposed, *de lege ferenda* a case should be made for a right or a duty of the platforms to monitor, C. Cauffman, ‘The Commission’s European Agenda for the Collaborative Economy – (Too) Platform and Service Provider Friendly?’ *EuCML Journal of European and Consumer Law*, 235-243 (2016). Then, ‘(t)he ‘passive’ nature of the platform, which under the current system leads to the application of the hosting exemption, could as well be regarded as lax behavior justifying liability if things go wrong’.

policy alternatives can be outlined.

Firstly, a ‘continuist’ approach from the perspective of the electronic commerce rules would equal platform operators to intermediaries with the consequent extension to the former of the liability regime of the latter. No general duty to monitor would be anyway imposed on platforms. Actual knowledge would be still the trigger for the platform to adopt adequate measures. In such a framework, the implementation of supervision mechanisms, report systems, complaint handling schemes and other internal trust-generating techniques within the platform would be deemed as private systems to obtain actual knowledge.

Secondly, a hybrid approach would preserve the no-general-rule-to-monitor principle but could impose on platforms some duties to introduce adequate monitoring mechanisms and implement report and complaint-handling systems in accordance with pre-determined governance standards. Thus, although the operator is not obliged to carry out a general obligation to monitor, it takes a preventive role by fulfilling governance decisions.

Thirdly, a disruptive approach would lead to depart from the path of the ‘safe harbour’ scheme for intermediaries and direct the regulatory option towards the investing of platform operators with an active role in prevention and civil enforcement. Under this policy approach, prospective rules on platforms might impose on operators a duty to protect users in cases of actual and imminent threat, a duty to verify the authenticity or the truthfulness of the information provided by users, or, for instance, liability for misleading information, mistakes, or even non-performance of the relevant services, under certain circumstances to be determined by the law.

2. The Users: Building a Community

The broad term of ‘users’ describes all registered members of the platform irrespective of the specific position (buyer/seller, lessor/lessee, licensor/licensee, investor/promoter, driver/passenger) they may hold in the subsequent transactions to be concluded or the relations or interactions of any nature entered into within the platform.

From a legal viewpoint, every user is the counterpart of the platform operator in the membership agreement and, at the same time, a prospective contracting party in future market transactions in relation to other users. From a technical perspective, upon registration, users are entitled to access the platform and enjoy the services in accordance with the respective user profile. In practice, by logging in with an activation key (password, username, electronic signature), the user is enabled to exercise rights and enjoy services in accordance to the contractual framework (membership agreement and service provision agreements). User account keys serve as contract-based electronic signatures for the purposes of any action to carry out within the electronic platform. It is commonplace that the own platform operator acts to that end as a certification

agency issuing the keys, monitoring the use and managing cancellation, expiration and any further circumstances likely to affect the validity of the contractual electronic signature. Nevertheless, the issuance and the monitoring of the electronic signature could also be entrusted to a third certification agency. In the latter case, the function of controlling user access would be, at least partially, outsourced.

Upon admission, registered users join the business community, strongly agglomerated and compacted by the common compliance with platform policies (internal protocols, rules book, codes of conduct, market rules).

Depending on the structure of the market, users can be admitted to the platform to operate solely in one of the prospective contracting position (as vendor, as licensor, as lessor, as landlord/lady) or in both of them (either vendor or buyer, licensor or licensee, lessor or lessee, sometimes driver or passenger). In some sectors, should the scope of the platform only cover one stage of the production/distribution chain, users are normally expected to operate in the same contracting position in all transactions – ie providers of spare parts, on the one hand, and manufacturers, on the other –. Accordingly, two different membership agreements should be drafted to sign in accordance to the expected contracting position (ie a membership agreement model for sellers and a membership agreement model for buyers).

3. Platform Ownership Models and Conflicts of Interests

As regards the relationship between the operator and the users, it might be worth discussing the possibility for users to be members of the operator or to anyhow participate in the operator's decision-making and the legal consequences likely to derive therefrom. The constellation of platform-based business models offers a wide variety of modalities as regards the ownership structure: independent platforms, non-independent platforms and mixed platforms. Interestingly, ownership structure is not only an element contributory to the design of the business strategy, but also represents one of the key factors in the assessment of competitive concerns and in the formulating of effective and reliable regulatory/supervisory models.

i) Independent or neutral platforms (*neutromediaries*). Under an independent model in terms of ownership, the management role in the platform is played by a company (or entity) independent from market participants. Accordingly, platform users cannot participate or have any interest in the operator (ie as shareholders). Overall, such a neutrality feature alleviates competition concerns and apparently strengthens the reliability of a centralized regulatory/supervisory model.

ii) Non-independent platforms (*consortium* or *coalition markets*). Under this category, market participants (users) are members of the operator, participate in the decision-making process, carry out management tasks or anyways control

the operator's activity. Users may hold majority of the operator or simply represent a minority group. Likewise, all users or solely a few of them meeting certain conditions might be eligible to participate in the operator. As a consequence, non-independent platforms can be further classified as supply-biased markets, demand-biased markets or hybrid markets depending on the commercial position held by the users who are entitled to participate.

From a business point of view, the economic rationale behind non-independent platforms is rather obvious. Non-independent models are industry-sponsored marketplaces. Hence, industry features and specific market interests are widely considered in the design of the platform and effectively internalized in market policies.

From an economic perspective, according to the scientific literature⁴⁶ it can be argued that electronic marketplaces favour buyers to the extent that reduce vendors' market power.⁴⁷ As a matter of fact, electronic markets would enhance information distribution and increase price competition. As a consequence, market equilibrium would be rebalanced in favour to buyers. As per such an economic rationale, buyers should arguably be more inclined to promote the creation of electronic platforms. On the contrary, a quick market observation reveals that there are platforms promoted by sellers (*offer-biased markets*). Very simply, expected profits earned as a platform operator could compensate the loss in purchase price as sellers.

Nevertheless, and despite the above-mentioned strategic reasons, non-independent markets caused several legal concerns. Remarkably, competition issues are likely to arise in the creation of non-independent markets involving leading companies in the relevant sector.⁴⁸

Likewise, an ownership structure revealing lack of independence of the operator in respect of one side of the user community or the existence of relevant financial or corporate ties may serve as indicia or evidence of a business model according to which the operator is a genuine provider of the target activity instead of a mere facilitator of users' activity. The pertinent legal framework corresponding to such main activity should then apply.

iii) Mixed platforms. In these markets, both sector participants and independent players are members of the platform operator. Synergies between, on the one hand, the neutrality perception favoured by independent markets and, on the other hand, the closeness to the market and the sensitivity to sector

⁴⁶ J.Y. Bakos, 'Reducing Buyer Search Costs: Implications for Electronic Marketplaces' *Management Science*, 43 (1997); J.E. Stiglitz, 'Imperfect Information in the Product Market', in R. Schmalensee and R.D. Willig eds, *Handbook of Industrial Organization* (New York: North-Holland, 1989), 769-847.

⁴⁷ B. Yoo, V. Choudhary and T. Mukhopadhyay, 'Pricing Strategies of Electronic B2B Marketplaces with Two-Sided Networks Externalities' *Proceedings of the 35th Hawaii International Conference on Systems Sciences* (Washington: IEEE Computer Society, 2002).

⁴⁸ *Covisint* case (IP/01/1155) (38.064) or *Volbroker* case (IP/00/896) (38.866).

interests permitted by non-independent platforms are triggered. Independent players are usually investors or technology suppliers.⁴⁹

Assuming the variety of ownership models and accepting the need not to unreasonably restrict competition or to impose unjustified conditionings on the legitimate exploitation of economic efficiencies, regulators may wish to tackle this issue from certain standpoint where interests need protection. Prospective rules might require disclosure of ownership structure or any other financial or corporate ties likely to affect the neutrality of operator in relation to the horizontal dimension, to question the unbiased provision of its services (regulation, supervision, rating, enforcement), or to simply determine in any way the decision-making process. A transparency policy would lead to unveil any possible conflict of interest.

In platforms for social networking or non-commercial activities (social networks, reviews aggregators, user-generated content platforms, recommender systems), the impact of financial or corporate ties between the operator and the user might be less frequent or even less decisive for the users' activity. However, a transparency policy could be equally relevant. Disclosure duties could be then referred to other factors such as selection criteria, fees paid by eligible users, listing criteria, possible filtering functionalities, platform policy on removing materials, search logic and positioning criteria, reviewer policy, influencer policy, platform-generated or sponsored contents or services, etc.

On the other hand, sector-specific regulations may go further and opt for restrictive or prohibitive measures for the purposes of ensuring the protection of involved interests. Thus, crowdfunding platforms or other platforms running in connection to capital markets and financial services could be subject to stricter control in ownership-related issues or conflicts of interests due to the nature of the activity. As a mere example,⁵⁰ Spanish legislation on Crowdfunding

⁴⁹ In some deals notified to the European Commission for competition scrutiny, platform operators responded to such hybrid ownership schemes: *MyAircraft.com*. COMP/M.1969 *UTC/Honeywell/i2/MyAircraft.com*, 4.8.2000, IP/00/912; *Chemplorer* COMP/M.2096 *BAYER/Deutsche Telekom/Infraserv/JV*, 6.10.2000, IP/00/1131; *ec4ec* COMP/M.2172 *Babcock Borsig/MG Technologies/SAP Markets/JV*, 7.11.2000, IP/00/1266; *Governnet* COMP/M.2138, *SAP/Siemens/JV*, 2.10.2000, IP/00/1102; *Date AS* by *Telenor Bedrift AS, Den Norske Bank ASA, ErgoGroup As* and *Accenture Technologies Venture BV* (IP/01/638).

⁵⁰ The regulatory panorama of crowdfunding looks fragmented and is subject to a regular adaptation. Within the EU, in absence of a common single framework, Member States have designed their own schedules to adopt and modify their domestic rules. The timeline of crowdfunding rules in the EU is long, changing, and still opened to new domestic initiatives. Only in 2016, two new Member States have introduced on investment-based and lending-based crowdfunding: Lithuania on 1 December 2016 and Finland on 1 September 2016. Likewise, other EU jurisdictions have proceeded to amend their legislation to establish a legislative framework for crowdfunding. To that end, Greece has modified, in September 2016, its legislation on the issuance of prospectuses and on provision of financial services. Concurrently, other Member States that had adopted early crowdfunding regulations are currently also reviewing their existing regimes and implementing (or are in the process of introducing) amendments (France in October 2016 and United Kingdom in July 2016).

(LFFE2015)⁵¹ provides for specific rules aimed at regulating the conflict of interests and limiting the interaction between the operator and the crowdfunding projects published on the platform.⁵² On the one hand, Art 62 LFFE2015 requires the operator to elaborate, publish and apply an effective policy on conflicts of interests. On the other hand, Art 63 sets a maximum quantitative threshold and subjects to a disclosure policy those projects promoted by the own platform operator or the operator participated in or contributed to as a creditor or as an investor.

Then, both general transparency standards and conflict-of-interest preventing mechanisms and sector-specific measures are expected in any future regulatory action on platforms.

4. The Membership Agreement

The membership agreement (or functionally-equivalent agreement) is concluded between the platform operator and each of the users meeting the eligibility requirements and successfully admitted to the platform.⁵³

In a nutshell, the membership agreement has the following features:

- i) It is concluded electronically.
- ii) It may be a B2B, or a B2C contract that is then subject to consumer law.
- iii) Although it is not fitting into a typified contractual model, it does reasonably qualify as a service provision contract with mixed obligations.
- iv) It is a standard term contract. Terms are pre-drafted by the operator and apply to all membership agreements of the same category (vendors, buyers, licensors, licensees). In general, the user is unable to negotiate, does not participate in the drafting and has to adhere to the contract on a ‘take-it-or-leave-it’ basis.

Even if the membership agreement aims to regulate the relationship between the platform operator and each user, its performance casts over the whole community, its terms deal with interaction among users and it contains obligations on the user and the operator to be exerted in relation to other users as well. In sum, the membership agreement is the main building material to pile up and flatten the community ground. Interestingly, by virtue of the agreement, each user commits to comply with in-force internal policies and platform rules

⁵¹ Business Finance Promotion Act, number 5 of 2015 (hereinafter, LFFE2015), of 27 of April (*Ley 5/2015, de 27 de abril, de Fomento de la Financiación Empresarial*), as published in the Official Bulletin (BOE) no 101 of 28 of April of 2015. Title V is entirely devoted to crowdfunding platforms legally named ‘*Plataformas de Financiación Participativa*’.

⁵² T. Rodríguez de las Heras Ballell, ‘Las plataformas de financiación participativa (crowdfunding) en el Proyecto de Ley de Fomento de la Financiación Empresarial: Concepto y funciones’ *Revista de Derecho del Mercado de Valores*, 1-23 (2014).

⁵³ About the admission process and the implications of a refusal to deal, T. Rodríguez de las Heras Ballell, ‘Refusal to Deal, Abuse of Rights and Competition Law in Electronic Markets and Digital Communities’ *European Review of Private Law*, 685-702 (2014).

not only against the operator but also in interacting and dealing with other users. Therefore, in case of breach of rules, the operator is entitled to resort to available remedies on the grounds of breach of contract and, likewise, users who suffered a violation can request the operator to adopt agreed measures against the infringing user (according to infringements and penalties policy) or claim compensation from the operator on grounds of its default.

5. Self-Regulation in Practice: Internal Policies, Rules Book and Codes of Conduct

In exercising the role of regulator, the platform operator adopts rules of various nature to govern the access, the use of services, the negotiation, conclusion and performance of transactions and the exchange information within the platform (internal policies, rules book, code of conducts).⁵⁴ As per the membership agreement, users are to abide by the market (platform) rules in force.

The most widely-adopted model is the centralized regulatory one. Under such a model, the operator is empowered by users (as per the membership agreement) to freely adopt, modify or amend rules to be in force in the platform. More exceptionally, however, users' involvement in the regulatory process may be anyway encouraged. Should the sense of community want to be stimulated, a more participatory model should be designed. If so, users would be informed, consulted or even called to vote in reform projects, amendments or enactment of new policies.

V. Key Issues to Consider for a Platform-Oriented Regulation: A Summary

The above analysis of the structure and the operation of electronic platforms reveal legal disruptive potential. Actually, on the one hand, platforms have legal profiles that are not sufficiently dealt with by transaction-oriented rules to consider in a platform/operator-oriented regulation, and, on the other hand, that platform operators do not smoothly fit into the binomial division of information society service providers. Prospective rules on platforms should essentially start from these frictional elements. A swift of policy options in relation to electronic intermediary liability regime would also accelerate the need for future rules on platform likely to enable the paving of a new path for prevention and civil enforcement in the digital economy.

First, the two-layer structure of a platform (user layer and operator layer) requires to address the question of which obligations the operator may assume in relation to the users, the transactions conducted within the platform and/or

⁵⁴ C. Ramberg, *Internet Marketplaces. The Law of Auctions and Exchanges On-line* (Oxford: Oxford University Press, 2002).

other aspects related to the activity within the platform or of the platform itself in the market (privacy,⁵⁵ IP rights, consumer rights protection, money laundering, misrepresentation, authentication, etc).

Such obligations can be accepted and configured by the terms of membership agreement between the operator and the users in the exercise of and within the limits of the private autonomy; or they could be provided for by legal provisions that might prevent the parties from excluding or limiting such duties. To the extent that legal rules impose obligations on the operators, they do also define their possible roles in the digital economy as regulators, supervisors, ‘first-line enforcers’, gatekeepers⁵⁶ in different ways, and certainly trust creators.

Those jurisdictions that are exploring the formulation of rules on platforms tend to prescribe duties on platform operators regarding the control of users’ identification, transparency duties, compliance monitoring, duty to verify information, duty to prevent imminent harm to users, or even obligations concerning the performance (liability for users’ non-performance). Local, fragmented, and differing domestic rules are deeply inconsistent with the global nature of digital economy and, besides, happen to be highly inadequate (even inoperative in many cases). Hence, an early harmonization of policy principles on platform responsibility and regulatory options about the role platforms are called to play would be highly desirable at an international level. Subsequently, specific obligations to ensure transparency, fairness, and users’ protection might be developed therefrom in a more consistent and harmonized way.

Second, liability rules for platform operators should be very carefully discussed. Whether operators are deemed as digital intermediaries, specific ‘safe harbour’ provisions would apply; but whether platform operators may frame their role by agreement, liability exposure is varied and depends upon the accepted degree of involvement and endorsement, if any.

At present, liability rules for intermediaries are not uniform and, more importantly, the debate about the falling of platform operators within the definition of intermediary for the purposes of the ‘safe harbour’ regime is open and lacking of a consensus view. Even more, the implementation of mechanisms proving or presuming actual knowledge and the setting of factors revealing diligent/expeditious adoption of adequate measures by the intermediary upon awareness are likely to exert different impact on the appreciation of the intermediary’s diligent behaviour, and consequently on liability exposure.

Thus, a clear and common formulation of a uniform concept of electronic platform modelling in legal terms the constellation of operating business models, the adoption of a set of uniform criteria under which the platform operator

⁵⁵ J.J. Pazo-Arias, C. Delgado Kloos and M. López Nores eds, *Personalization of Interactive Multimedia Services: A Research and Development Perspective* (New York: NOVA, 2009).

⁵⁶ S. Choi, ‘Market Lessons for Gatekeepers’ *Northwestern University Law Review*, 916-966 (1998); R.H. Kraakman, ‘Gatekeepers: The Anatomy of a Third-Party Enforcement Strategy’ *2 Journal of Law, Economics & Organization*, 53-104 (1986).

might be deemed as an intermediary, and the devising of a common liability regime for platforms (actual knowledge, notice and takedown systems, adequate measures, supervision duties, fault liability, objective liability) would be relevant areas to focus regulatory attention.

Third, as the community-based architecture of platforms enable the articulation of decentralized trust-generating mechanisms (reputational feedback systems, recommender systems, rating and listing), it might be pertinent to consider the elaboration of uniform concepts regarding those decentralized reputational systems, reflect on possible common criteria in design and operation (good practices, standards), and clarify eventual liability scenarios.