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Challenging content exclusivity in network industries: the case of digital broadcasting

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21st European Regional ITS Conference Copenhagen, 13-15 September 2010

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Challenging content exclusivity in network industries: the case of digital broadcasting

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Abstract

Interacting with network externalities and switching costs, exclusive dealings for premium contents in digital broadcasting markets allow incumbents to deny rivals critical mass and profitable market entry. A downstream company that acquires the exclusive rights to high-quality programming in the upstream market may obtain a competitive advantage over its rivals which suffer from negative externalities. Instead of fostering competition and innovation, exclusive licensing serves as an effective entry-deterrent strategy in order to preserve market power and to leverage monopolies. Although exclusivity for premium content has long been considered the only way for guaranteeing the remuneration of the vast investments in content production and platform infrastructure, this paper challenges the profitability of this exclusivity strategy in network industries. The paper questions the traditional economic assumptions underlying exclusivity of content and argues that the increasing emergence of multi-sided platforms in the broadcasting industry creates incentives for right holders to multi-home rather than single-home their contents.

Key words

Business model, digital broadcasting, exclusivity, bundling, shared access, innovation

1. Introduction

The widespread diffusion of digital delivery networks and reception equipment in the broadcasting industry has fundamentally reshaped the production, distribution and consumption of media content. As innovation in information technology has a disruptive impact on media ecosystems and business models, digitisation and convergence facilitate a shift away from the classical vertical layer model into the converged layered industry (Fransman, 2002, 2010). Technological advances have induced a modularised structure of industry demanding vertical specialisation rather than vertical integration. As transaction costs have decreased thanks to the Internet, firms are likely to replace their vertical integrated businesses with market relations and focus on one particular activity in the market. This modularisation of skills and capabilities will ultimately result into the

deconstruction of the communications industries with the formation of strategic alliance partnerships as a means of accessing resources and competences (Li & Whalley, 2002). Such a modular architecture facilitates entry of newcomers in all layers by allowing them simply to focus on core activities, and enhances competition and innovation in all industry layers. Consequently, Internet service providers and mobile network operators have entered the broadcasting market by exploiting pay-television platforms and launching mobile television services as part of their multi-play strategy.

Owing to this modularisation of value chains, stand-alone firms are incapable of exploring and exploiting all competencies and components required for developing and producing full-service information goods. In the digital economy, value is co-created by a series of partnerships in a value network, in which stakeholders – suppliers, allies and even consumers – join forces, innovate and co-produce value. Value networks should be understood as a set of relative autonomous business units that are managed independently, but co-create on the basis of bilateral service agreements (Malecki & Moriset, 2008). Since the company's competitive position is mainly based on its system of relationships, a performing network should be composed of interconnected complementary nodes. According to Norman and Ramirez (1993), "the key strategic task is the reconfiguration of roles and relationships among this constellation of actors in order to mobilize the creation of value in new forms". The importance of strategic alliances has been illustrated during the recent HD-DVD vs Blu-ray format war, in which consortia representing consumer electronics, computer hardware and movie studios went head-to-head for establishing the industry standard. The winning format was not necessarily technological superior, but was supported by an impressive consortium and proved compatible with successful hardware devices such as Sony's PlayStation 3, which produced network externalities in favour of the Blu-ray format.

Historically, gatekeepers such as network operators used to create monopolies and bottlenecks as market power was largely derived from controlling stakes over the distribution stage. Today, traditional scarcity has changed into an era of plenty characterised by abundance of information and consumer choice. As established broadcasting companies have fear of losing their historical grown dominance over production and especially distribution modalities, more critical voices argue that these incumbents have started deploying strategies for preserving market power, creating scarcity and reinventing bottlenecks (Mansell, 1999, 2004). One strategy to deal with this increasing market uncertainty is the exclusive acquisition of premium content. Content bundling forms an essential part of the value proposition to consumers, but access to compelling content is considered a major bottleneck for alternative service providers as incumbent platform operators have signed exclusive dealings with right holders. Although exclusivity for premium content has long been considered the only way for guaranteeing the remuneration of the vast investments in content production and platform infrastructure, this paper challenges the profitability of this exclusivity strategy in network industries by means of a literature review. The paper questions the traditional economic assumptions underlying exclusivity of content and argues that the increasing emergence of multi-sided platforms in the broadcasting industry creates incentives for right holders to multi-home rather than single-home their contents.

The paper is structured as follows. The first section briefly introduces the platform concept and discusses why network externalities may give rise to demand-side economies of scale and 'winner takes all markets'. Afterwards, the importance of premium content for overcoming the 'chicken-and-egg' problem and for

developing sustainable business models is highlighted. Moreover, the plusses and minuses of exclusive dealings in two-sided markets are discussed. The final section then argues why non-exclusive arrangements in externality-driven industries may provide benefits for content producers, platform operators and viewers, and discusses the move towards the platform-based broadcasting model.

2. Network externalities in platform industries

Digital information technology radically affects the exchange of goods, services and information in society, foreseeing a major impact on the distribution channels and on the vertical organisation of the communications industries. Since digital access network infrastructure has become vital for carrying multimedia content and applications, platform-based intermediaries have increasingly gained importance (Illing & Peitz, 2006). In general, two polar types of intermediaries can be distinguished: one-sided merchants and two-sided platforms (Hagiu, 2007). In the merchant mode, intermediaries acquire goods from sellers either on a wholesale or consignment basis and resell them to buyers. Generally, right holders sell premium content outright to paytelevision operators while consumers pay for accessing this content. This business model opposes to the platform model that allows affiliated sellers to sell directly to affiliated buyers. Consider video on demand applications such as YouTube, whereby content is affiliated with the platform and income is shared among the content provider and the platform owner (Evens, in press). In the networked broadcasting system, intermediation thus increasingly takes place through multi-sided platforms and partnership models. Broadcasting platform infrastructures encompass several roles (see figure 1), distinguishing between (1) demand-side users (viewers), (2) supply-side users (content providers), (3) platform owners (content aggregators) and (4) platform sponsors (technology support)(Eisenmann, Parker & Van Alstyne, 2008). Platforms are regarded as structuring elements in the fluid media ecosystem, whose overall performance is derived from the coordination and the cross-subsidisation of network externalities between different markets through a common platform, treating one side of the market as the profit centre (subsidising) and the other as a loss leader (subsidised).

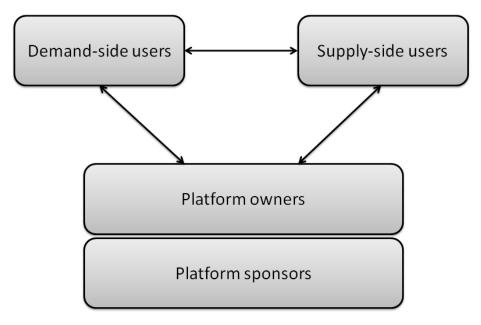


Figure 1: Typology of platform roles

In multi-sided platform markets, value is not created in the transformation of goods, but in their mediation between different kinds of users, who pay for access to the network. The value a platform generates increases with the number of users that join the network. Such networks compete to capture rents from consumption externalities that give rise to demand-side economies of scale and 'winners takes all' markets (Katz & Shapiro, 1985; Shapiro & Varian, 1999). In this context, exclusivity provisions can interact with network effects to create substantial entry barriers, especially when switching costs for demand-side users are considerable (Klemperer, 1987). In two-sided markets, incumbents aim for signing up content providers exclusively so as to prevent multi-homing (affiliation to multiple platforms), and extract the full network benefits from users. As exclusivity in information markets operates on an even grander scale with network effects than with conventional economics, demand-scale economies allow incumbent companies to exclude other platforms to deny rivals critical mass to profitably enter markets and exploit platforms (Doganoglu & Wright, 2010; Shapiro, 1999). A downstream company that acquires the exclusive rights to high-quality programming in the upstream market may obtain a competitive advantage over its rivals which suffer from negative externalities (Harbord & Ottaviani, 2001). When network effects are there, the demand for a product or service depends not only on its price but also on the expected number of other users. Since television programming has conversational value as well, which is increased with every additional viewer, the exclusive coverage of major events such as the Olympics may generate positive social network externalities and may create incentives for people to subscribe to the particular platform (Boardman & Hargreaves-Heap, 1999).

Indirect network externalities are at the heart of the celebrated 'chicken-and-egg' problem, which refers to a lack of incentives for platform investment. Platform operators should break the vicious circle that is hindering the platform's development: producers need consumers, who need compelling content at their turn (Parker & Van Alstyne, 2005). Whereas supply-side users are reluctant to invest in often expensive content when a substantial consumer base is not certain yet, uncertainty about available content hinders end-users to join the network. Coexistence of these processes may lead to absence of network externalities and lack of incentives

for the platform's development (Evans & Schmalensee, 2009). Hence, much attention should be devoted to business model design issues to break this circle by matching stakeholder expectations in order to make money (Rochet & Tirole, 2003). In this context, pricing and content bundling are regarded as critical components in the value proposition of broadcasting platforms. Failures of recent technologies such as DAB or CD-I and the format wars for VCR and DVD have shown that the availability of attractive content crucially determines the success of a technology. The adage 'content is king' thus still prevails, especially in an essentially top-down industry as television. The increase of network capacity and the homogeneous transmission quality of networks "imply that consumers' preferences tend to be driven by content rather than technology much more than before" (Nicita & Rossi, 2008). High-quality, premium content, characterised by excessive rights fees such as live sports and Hollywood blockbusters, has proven its strategic importance in helping digital television platforms to build a substantial subscriber base. However, access to must-have content has become a major bottleneck for alternative platforms as incumbents and first movers are raising substantial entry barriers for newcomers by implementing tying and bundling strategies (Evens et al., in press). Introductory offers including premium programming are used by first movers attempting to increase consumer demand for their platforms. In twosided markets, when such exclusive deals are not offered, incumbents would eventually lose out when competing operators launch superior platforms, which may be able to capture externality rents.

For new entrants in the market, rights ownership of premium content functions as a significant competitive advantage for attracting a substantial customer base and for resolving the chicken-and-egg problem. Owing to the intensified struggle for market share among platform operators, premium rights for mega sports events and major competitions have heavily inflated. NBC won the USA rights to the 2010 and 2012 Olympics for \$2.001 billion representing a 33% boost from the \$1.508 billion bid for the 2006-2008 Games. This exponential increase in acquisition costs is generated by incumbent pay-television operators' requests for exclusivity and their strategy to foreclose the market. This finding may be opposite to the traditional assumption according to which exclusivity was the consequence and not the origin of the excessive costs observed for purchasing premium content (Wachtmeister, 1998). The exclusive coverage of live sports encourages people to invest in reception equipment and acts as a loss leader to attract a higher amount of long-term subscribers. Instead of fostering competition and innovation, however, exclusive licensing for premium content raises rival's costs, creates entry barriers and leads to a market inefficient outcome. This supports earlier findings that bundling denies rivals scale and serves as an effective entry-deterrent strategy in order to preserve market power and to leverage monopolies (Aghion & Bolton, 1987; Carlton & Waldman, 2002; Nalebuff, 2004; Whinston, 1990).

3. Exclusive dealings in broadcasting

As mentioned, acquisition of premium contents is seen as primary means of differentiation and competition between platforms for consumer adoption. However, the overall extent of exclusivity depends from industry to industry. In the videogames market, for example, games of all major publishers are available to each console (Sony PlayStation 3, Microsoft's Xbox, Nintendo Wii and PC), except for those few games produced or bought out by hardware manufacturers to solve the chicken-and-egg problem. Whereas EA Sports affiliates to each platform, blockbusters such as Gran Turismo and Toy Story exclusively contracts with the PlayStation 3 system.

In the broadcasting industry, however, exclusivity for premium contents has long been considered the only effective way for stimulating investments in content production and platform development. As European paytelevision and later digital platform operators started exploiting business models based on a set-top box system providing conditional access to encrypted content, premium contents helped to differentiate pay-television offerings from free-to-air broadcasters. Consequently, content producers have re-arranged licensing schemes in exclusive time windows in order to expand market power and to optimise the lifecycle management of their contents. By using exclusive windows, premium right holders aim to limit content availability benefiting from scarcity. Such windows, in which value is driven by a unique matrix of time, exclusivity, differential pricing and repeat consumption, allow maximising profits in separate markets and consecutively releasing content licenses for particular markets and purposes as theatrical exhibition, home video, pay-per-view, pay-television and freeto-air television (Ulin, 2009). The limited competitive structure of each layer within the European pay-television market has induced a fundamental transformation from 'exclusive windows' to 'exclusive dealings' as Nicita and Ramello (2005) argue. The original exclusive window assigned for the use of particular contents by paytelevision operators was interpreted as the right accorded to the incumbent operator to broadcast content to subscribers on an exclusive basis. Exclusivity contracts are thus not inherent in pay-television markets, but are the outcome of competitive strategies deployed by first movers to foreclose the market.

Advocates of content exclusivity have argued that exclusive agreements can improve overall efficiency as they minimise transaction costs, protect brand names and protect intellectual property from free-riding. Given operators' large sunk costs in equipment and platform investment, the exclusive purchasing is an effective way for persuading viewers to subscribe and for recouping the huge costs sustained for acquiring premium content. Broadcasters and platforms see exclusive dealings as a means for building up audiences, increasing advertising and sponsorship revenues and gaining public prestige. Furthermore, exclusivity of contents helps operators in differentiating themselves from competitors and even allows them to generate additional revenues from granting sublicenses to competing channels. For content producers and sport organisers on the other hand, the exclusive selling of broadcasting rights is assumed to guarantee a maximum short-term profitability as the price paid for exclusivity by one broadcaster probably exceeds the sum of amounts that would be paid by several broadcasters for non-exclusive rights. The more intense the competition on the demand-side, the higher the acquisition prices for broadcasters and the higher the return for rights holders will be (Wachtmeister, 1998). Hogendorn and Yuen (2009) have found that a must-have content provider such as Disney's ESPN for US paytelevision operators is more likely to sign exclusive access contracts with a single platform if the content popularity is high, market share differences between platforms are high and platform compatibility is low. However, as the marginal cost for content providers to broadcast on multiple platforms is negligibly small and compatibility thus high, these findings suggest that content providers are better off with non-exclusive contracts.

Since exclusivity contracts have transformed the pay-television business in a 'competition for the market' model where the winner takes all, the network externalities generated by these exclusivity contracts have raised antitrust concerns in Europe. Although exclusivity is a widely accepted practice in the broadcasting industry and in itself does not breach the principles of free and fair competition, such dealings have raised the

attention of competition authorities both on economic and social arguments. Exclusivity dealings are an essential component of the pre-emption strategy deployed by dominant upstream and downstream firms as they may raise rivals' costs, deter efficient entry and therefore foreclose markets. Combined with substantial switching costs for both supply-side and demand-side users, strong network effects can induce chicken-and-egg problems for alternative platform operators as they might hinder reaching critical mass. Consequently, this scenario may in part explain the delay in investments in and the roll-out of alternative network infrastructures such as fiber optic cable and digital terrestrial television in many European countries. Exclusive dealings may thus hinder innovation and competition as they create entry barriers for the development of alternative platforms (Nicita & Ramello, 2005). Recently, UK's biggest pay-television provider BSkyB was forced by the telecommunications regulator Ofcom to make two of its Sky Sports channels available to competing cable and terrestrial television providers at significantly reduced wholesale prices. The decision fell after four competing platforms had complained that BSkyB's control of broadcasting rights was creating a vicious circle hindering competition and keeping prices artificially high. Ofcom argued that BSkyB was using its market power in the wholesale supply of their premium channels to limit distribution to rivals, therefore driving up access prices, limiting consumer choice and restricting platform innovation (Ofcom, 2010). Contrary to Weeds (2007) stating that subscribers are better off under exclusive distribution as exclusivity intensifies price competition to the benefit of consumers, others (Armstrong, 1999; Doganoglu & Wright, 2010; Harbord & Ottaviani, 2001) argue that a ban on exclusive dealings would intensify downstream competition and transfer the social benefits of premium programming from firms to consumers. Whereas exclusive arrangements may harm consumer welfare at the expense of industry profits, non-exclusive distribution remains the welfare optimum as the largest group of consumers has access to premium programming and especially events of major importance for society (Hagiu & Lee, in press).

4. Towards a platform-based broadcasting model

Exclusivity for premium programming has long been considered the only effective way for guaranteeing the remuneration of the vast investments in content production and platform infrastructure. Exclusivity creates incentives for right holders to produce innovative and high-quality content, ensures that service providers have access to popular content and reduces the risk that platform operators get stuck in a chicken-and-egg problem. The European pay-television business suffers from bloody bidding wars for the acquisition of premium rights that are exclusively tied to the winner (e.g. Leandros & Tsourvakas, 2004). Owing to considerable sunk costs in platform development and content acquisition, the market tends towards fierce competition and monopoly structures. However, as argued by Evens (in press), exclusive rights purchase reflects the one-sided merchant mode and leaves no opportunities for a multiplatform strategy as other parties are denied access to crowd-pulling supply. Value creation in broadcasting markets is changing as content is progressively being rented through licensed access rather than being bought by platform operators. Given the slight transition towards externality-driven platforms and the rise of the retail model (pay-per-view), questions have arisen whether exclusive dealings really are the most profitable strategy for premium programming producers (Armstrong, 1999; Balto, 1999).

Regarding exclusivity, content producers and platform operators might have diverging interests. Both aim for the maximisation of profits and return on investment, but strategies for achieving these goals may oppose. Whereas content producers should strive for maximal diffusion of their contents across all available platforms in order to capture network rents, platform owners are willing to acquire exclusive contents in order to raise entry barriers, foreclose markets and preserve market power. So far, right owners have sold broadcasting rights to the highest-bidding platform on an exclusive basis. This has long been interpreted as the most optimal strategy for both actors, but regulators are increasingly taking into account the interests of consumers that are denied access to premium programming as rights are held exclusively by another service provider. Regulators and competition authorities are considering different models for access to contents with special attention to the effect on producers' incentives to invest in content production, new entrants' incentives to invest in alternative platforms, incumbents' dominant position and viewer interests (Nicita & Rossi, 2008). Apart from regulatory interventions (such as in the BSkyB case) aimed at creating more open and competitive markets, it is argued in this paper that premium programming producers and even platform operators should innovate their business models in order to benefit from the rise of externality-driven platforms and enhance innovation both in contents and technology.

It is doubtful whether platform operators and gatekeepers will lose total grip on the selection, aggregation and transmission of broadcasting content in the future, but bargaining power will increasingly shift towards premium content producers and right holders as technological convergence is creating abundance in the distribution layer. As foreclosing portions of externality-based industries is inefficient and too costly for content producers as they strive for maximal diffusion, affiliating with several platforms would entail profit maximisation if they get paid on a per-user fee basis. Content producers may sell their contents outright to platform operators when there is a high degree of complementarity among sellers' products. In the case of high-quality content, Hagiu and Lee (in press) argue that right holders might profit from a multi-homing strategy. Whereas exclusivity of mid-quality content can soften price competition at the platform level, lowquality content should multi-home as it does not yield any competitive advantage. Increasingly, right holders, especially in the sports business, are exploring this shared access to premium contents and provide nonexclusive content to multimedia platforms that can be accessed by means of extra payments. The digital channel Eredivisie Live, broadcasting games of the Dutch soccer's top-tier league, acts as an interesting case. Instead of selling its rights exclusively to the highest-bidding platform, the league managed to agree distribution deals with all operators (cable, satellite, terrestrial, xDSL) but ceded control of pricing to the platforms. The channel is produced by Endemol Sports and aims to reach as many viewers as possible and therefore is not exclusive for one particular platform, but it cannot influence the pricing. In return, the distribution deals are thought to include revenue-share agreements. Following the Dutch example, the French football league released its plan to start its own dedicated pay-television channel. The service will run alongside existing contracts with Orange and Canal+. Contrary to Eredivisie Live, the French league aims to prepare for the possibility that Orange will not bid for future broadcast rights so that Canal+ would become the sole bidder for television rights to French premier league matches in 2012 (which would depreciate the value of all rights packages).

Such a business model based on shared access to premium contents and on royalties paid by the platforms for each viewing would allow producers' revenues to grow with the number of viewings and the multiplatform diffusion of the contents (Nicita & Ramello, 2005). Removing exclusivity as artificial barrier would generate incentives for technological innovation and the development of alternative broadcasting platforms, and would move competitive advantage from exclusivity of content to pricing, quality of service, programming variety and innovative features. The dominant position of a platform should not only rely on the exclusive provision of premium content and on the timing of its market entry, but on its whole value proposition including customer support, ease of use, product innovativeness, interoperability etc. Exclusive arrangements are now used by first movers to limit scale of alternative providers and to push them out of the pay-television market. Dominant positions as a result of network externalities may induce monopolistic behaviour and may dampen incumbent's incentives to invest in customer service quality and technological innovation in the long term. As they fear cannibalisation of their businesses by new media services, incumbents often hold back premium rights as part of their pre-emption strategy. For consumers, non-exclusive arrangements would allow for getting access to premium contents from any single delivery platform and reduces switching costs between platforms as an industry barrier. As Rochet and Tirole (2003) contend, competitive pricing on one side of the market depends on the extent of multihoming on the other side of the market. Non-exclusive distribution intensifies downstream competition and should thus result into lower subscription prices. Consequently, more people would go digital so that both platform operators and broadcasters will benefit from increased consumer uptake and expenses. In such a platform-based broadcasting model, operators would have open shared access to highquality content, premium right holders would maximise profits from capturing network rents and consumers would have equal access to an optimal variety of contents.

5. Conclusions

For years, national regulators have been demanded by European Directives to implement legislation aimed at encouraging new market entries and at creating incentives for more intense competition and lower prices in telecommunications industries. Local loop unbundling has been used for allowing market entrants to employ the incumbent's fixed infrastructure without the need for rolling out proprietary networks and for supporting the proliferation of alternative delivery platforms. In countries where digital broadcasting has a considerable high market penetration, such as France and Spain, this entry policy has been a key factor allowing IPTV newcomers to develop advanced services. However, network externalities have induced monopoly power to first movers leaving entrants little opportunities to develop competing offers since access to premium contents has become one of the major bottlenecks for alternative providers. Hence, network regulation should be considered as a first step towards an open market, but should be accompanied by content regulation, which should result into equal access to premium contents for all market players. As bargaining power has changed from distributors to right holders, regulatory attention has shifted to control over content. Following the network neutrality principle, regulatory interventions aim at creating incentives to invest in the development of competing delivery networks and at granting access to incumbent operators' exclusive offerings. In general, such interventions should meet three important public policy objectives (Nicita & Rossi, 2008). First,

regulations should be aimed at balancing the interests of right holders and distributors and at maximising incentives for content production and content distribution. Second, regulatory interventions should stimulate investments in technological innovation and network capacity, and should be aimed at establishing maximal quality of service to final customers of both incumbents and newcomers. Third, as foreclosure strategies used by incumbent operators may hamper free competition in network markets, antitrust regulations should focus on restraining dominant positions in order to enhance competition in terms of increased consumer choice and lower prices.

With respect to exclusive dealings, European and national competition authorities dispose of a wide array of regulatory instruments for securing competition in the market. Given the increasing number of merger cases in the media sector, regulators are accepting remedies foreseeing the granting of access to essential inputs or access to specific content to third parties on a non-discriminatory and transparent basis, better known as mustoffer obligations. Dominant operators such as BSkyB have been mandated to provide must-have content to alternative infrastructure operators either on a wholesale or retail basis. Such remedy should lower barriers for entering the pay-television market and enhance 'competition in the market'. As a response to unique selling units, content sharing in the form of purchasing pools or sublicensing agreements has become another popular model for gaining access to content. By establishing buying pools, broadcasters and platforms aim to control the huge price increases for premium contents and allow that premium content is spread alongside competitors. Numerous examples in the broadcasting field may show that firms are increasingly ceding exclusive control over contents as the online and illegal distribution of content is undermining the value of the window systems. In addition to regulatory interventions, content producers and broadcasters may proceed to the non-exclusive distribution of premium contents. By spreading their contents over as many platforms as possible, right holders are able to capture network rents whereas non-exclusive distribution of contents may allow platform operators to spend fewer resources for content acquisition and allocate budgets to technological innovation and customer support. In the future, digital broadcasting markets will become more open and competitive advantage will shift from content exclusivity to quality of service, innovativeness and pricing. As all providers should have equal access to high-quality content, pay-television operators and digital broadcasting platforms should be able to really compete in the market.

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