

Ticketing as if consumers mattered

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Foreword

There are continued complaints on matters of event ticketing, particularly in music, despite recent changes in legislation and in practice. This report, a development of ideas following from Waterson (2016), sets out a personal view on the market, focusing on the UK and in particular the music sector, as it now exists. In it, I ask and respond to a self-imposed question- what might an improved ticketing system set out to achieve? In my view, a desirable ticketing system would be one that puts consumers first, both in terms of ease, fairness and choice. Hence the title. Currently, many of the participants in the market do not have consumers foremost in mind, and the lesson from various other markets where technology has shown significant potential is that ultimately, a framework that provides what (most) consumers want wins out.

DISCLOSURE STATEMENT

This updated report was supported in part by a grant from the Aventus Foundation but is entirely written by me and I have exercised complete editorial control, so that it is completely independent and, by the same token, should not be considered as representing the views of that foundation or anyone with whom I have discussed the subject. Nor indeed should it be taken to express the views of any organisation which employs me.

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Ticketing as if consumers mattered

Some vignettes

I start with some vignettes which are not direct quotations, but which contain views which have been expressed to me at various times since 2015.

From the consumers' point of view, examples:

- 1. I queued online but didn't get a ticket then saw them on secondary at a higher price
- 2. I bought from a secondary but didn't realise it was a secondary site; will I get in?
- 3. I didn't realise the event was happening until too late
- 4. I bought for some friends, but not all can go/ I want to change who is going
- 5. I want to buy tickets for my daughter and her two friends under 16, but it says the buyer needs to take their credit card and I'm not going
- 6. I can't now go because I am ill/ I became pregnant and I will be 8 months gone by the time of the concert, so I don't want to risk standing and being jostled in a crowd/ my personal circumstances have changed, and I urgently need some money to tide me over
- I have changed my mind about going because my favourite band member has just left the band/ my favourite team will not be in the semi-finals now
- 8. It's a week to go and I haven't received my tickets; I am travelling now until the date of the concert
- 9. I bought a ticket on Facebook but it is probably fake, I now realise; how do I check?
- 10. I'm worried about security there were no real checks at the entrance.

From the ticket industry's point of view, examples:

- 1. We are fed up of touts and bots buying up tickets, and want the ticket agents to fix this problem.
- 2. I put a limit on how many tickets each person could buy, but some of the sites re-set every few minutes so the same person can make repeated purchases
- 3. I would never do this, but I think some of the sellers have placed tickets straight on the secondary market and it's giving me a bad reputation
- 4. As an artist, I set the price low because I want my fans to come and they aren't wealthy
- 5. This tour has stiffed and I'm losing money on it, and to make matters worse, if the band sees a half-empty venue they won't play their best, but I don't want to be seen to be degrading the ticket price
- 6. Venue control is the venue's business, not mine
- 7. As a venue, I expect the promoter to pay for venue control that's adequate
- 8. People aren't coming because the prices are too high on secondary

Consumer experience of ticket purchase and attendance

Generally, consumers favour a seamless and straightforward experience. In the case of event ticketing, this means not only discovering an event they want to attend and obtaining a ticket for that event in a smooth manner, but also receiving the ticket they paid for (preferably, soon after purchase) and achieving subsequent easy and safe entry into (and egress from) the venue. Unfortunately, systems that are designed to reduce or eliminate the role of the secondary market commonly lead to long queues at the venue whilst ID of various kinds is checked, or alternatively consumers discover that, despite clear rules being set out regarding ID they must bring, no checks are made, or the checks are perfunctory. The underlying problem is that large numbers of ticket holders arrive at the venue close to the time of the event and there may be inadequate security or technology in place able to meet this demand. This requires thought from the start of planning the event as to what form the security will take and what checks will actually be made, in order to meet consumer expectations regarding entry, a problem in the case of all large venues and specifically-timed events.

The reality of consumer behaviour as it affects ticketing

Attending an event is usually a social occasion- attendees mostly attend with friends or family. Therefore, there are two challenges for ticketing to address, when subject to a constraint. The first is to allow purchase by a member of a party of tickets on behalf of others, as well as for themselves, in the circumstance where they do not necessarily know the final constituents of the party. The second is to allow purchase by someone on behalf of others, for example minors, who wish to attend when the purchaser will not themselves attend. Both these challenges are easily met by paper tickets sent out in advance to the purchaser. However, this mechanism is subject to manipulation by someone seeking to buy tickets for profit, which may be against the wishes of the seller or artist. If I can buy four tickets, say, then I can sell them on a secondary platform, or if the lead purchaser must be present at the venue, three tickets to strangers via the secondary market.

Clearly, a degree of hype is important in selling an event- it has a party-type characteristic of people wanting to go if others are also going. But arguably the over-common "sell-out" status is counter-productive. Few events *actually* sell out, so that the time-consuming and inconvenient rush for tickets at a particular time (when most people are likely to be at work, given the timing) is actually unnecessary, and drives people into the hands of secondary sellers. Commonly, (some) primary sellers have tickets available whilst people concurrently rush to secondary sites to obtain tickets. A lesson from energy markets is that people don't like searching much, and don't necessarily undertake search

in a logical manner. Added to this, many customers are not particularly experienced at ticket purchase, and someone with a limited record of attending events is not likely to be easily targeted for publicity by a particular primary seller, if last time they purchased from another source. These are key reasons why secondary platforms often pay to come high on a Google search, although tickets may be available still from primary sellers.

Additionally, delays in delivery until near the time of the event involved in several schemes plays into the hands of fraudsters who wish simply to take money for a "ticket" and then disappear long before the event itself happens.

Recent developments in the regulatory framework to support consumers

In the UK, the Consumer Rights Act 2015 included a Section, 94(1), which listed several provisions relating to Secondary Ticketing. These had been included as a result of an All-Party Parliamentary Group deliberating the role of the secondary ticketing and wishing to regulate it more closely than had been the case. Following the Act, I was commissioned to write a review of the workings of that market to be presented to Parliament in May 2016. My review included nine recommendations. Briefly, I discovered that, despite the specific provisions in the Act, within the first year no enforcement action had been taken based upon it. I therefore recommended that Trading Standards be funded to ensure compliance by secondary sellers, and that action be taken against platforms which failed to abide by the provisions. I also recommended that the primary industry take more responsibility for its actions which facilitated secondary traders flouting the provisions of the Act, forming an industry project group to prosecute that activity including taking preventative actions against large-scale purchasers and involving themselves in cyber-security bodies to counter "bot" attacks.

The Government accepted my recommendations in full, following some delay, in March 2017 and allocated some funding. As a result, after a somewhat slow start, National Trading Standards and Trading Standards Scotland commenced investigation of particular individuals who engage in large-scale purchases, the Competition and Markets Authority (CMA) investigated secondary platforms' adherence to the legislation (including dawn raids on two companies' offices) and are considering the actions of one site, Viagogo, further with a view to enforcement through the courts. The other three main sites have signed undertakings regarding the detail to be provided in listings, including

information on the seller.¹ New rules have come in via Parliament from April 2018, relating to a Universal Ticket Number. The CMA has also updated its advice to the primary market regarding resales. The Digital Economy Act, April 2017, gives Government power to "ban bots", and the legislation imposing unlimited fines on transgression of the Act came into force on 5 July 2018.

In the wider context, in February 2018 Google updated its terms to require Certification of secondary websites (although the extent to which this is working is moot). In March 2018 the Advertising Standards Authority announced a clampdown on misleading pricing practices on secondary websites and banned Viagogo from using the phrase "official site", referring them to Trading Standards for misleading practices. STAR (Secure Tickets from Authorised Retailers) has sought to become the equivalent of an industry "kitemark" for tickets, developing a published list of practices with which members must comply. The FanFair Alliance was formed within the primary industry by a group of music managers aiming to combat large resellers obtaining ticket stock in an unauthorised manner, acting as a pressure group through suggesting and sharing various mechanisms of ticket sale that minimise unauthorised bulk purchase, advice to other managers and artists, and the ticket-buying public, together with pressure on government in respect of actions by the CMA, Trading Standards and enforcement of the Digital Economy Act. Nevertheless, it is clear that particular resellers do not comply with legislation where they think they can get away with it, impacting consumer experience.

Though this report focusses on the UK ticketing industry, these various activities should be seen in the context of a growing world-wide concern about the actions of secondary ticket sellers and platforms and the event ticketing market more generally, although the concerns differ somewhat from country to country. Amongst those most vocal are Ireland, Italy, France, Switzerland, various provinces of Canada, states of Australia, New Zealand and some in the US (including some national "BOTS" legislation)- but within the US there is a very mixed picture from state to state, with some states prioritising secondary sellers' rights/ freedoms. The underlying cause is consumer concern about opacity in the ticketing market and the fall-out from this. The issue is wider than secondary sales.

¹ More recently still (August 2018), Ticketmaster has made the decision to discontinue its two separate secondary sites, bringing the number down to two.

Accordingly, in this report I attempt to isolate the reasons for that concern, the reasons why secondary ticket sellers and sites exist, and potential solutions to bring the market more into line with the sale of other services. Ultimately, my aim is to improve consumer experience.

The history and development of event ticketing

Ticketing is a complex business. There are few industries where the aim is to sell substantially all the inventory (in this case, tickets) in the first day they are on sale, for a perishable good that the consumer won't appreciate until maybe 9 months have passed. The resultant hype about ticket sales for the event persuades people into buying quickly, committing increasingly significant funds to attend, without knowing whether something might intervene to prevent that, and mostly with no possibility of a "cooling off" period. Returns/ resales policies differ widely although "ticket insurance" products are increasingly offered at the point of sale to help protect consumers against being unexpectedly unable to attend the event at short notice. People also buy for others, commonly without specific people in mind, or without intending to go themselves, for example as a gift. Given the time pressures on ingress at a typical venue, entry controls can be limited, so paving the way for policies previously carefully determined by ticket sellers or event organisers to be abandoned on the night, despite best intentions.

The internet has enabled greatly increased distribution, and hence sales, of tickets by comparison with the system whereby the box office plus a couple of record shops sold physical tickets. But it has also enabled the growth in the secondary market. Promoters carry most of the risk associated with an event and have limited means of offsetting that risk. Competition between promoters to stage a popular act leads to them committing to almost all the ticket sales revenue after costs going to the artist, based on substantially all the venues being full. Thus, commitments to the artist where the guaranteed fee and percentage of the door amounts to 90% of the gross are not uncommon. This clearly creates a problem for the promoter if ticket sales are going badly, and also creates conflicts of interest when the tickets are selling quickly, and demand clearly exceeds supply at the pre-set price.

Just like in an internet business selling goods, various scenarios happen and need planning for. Internet clothes retailers need to develop a streamlined process for returns, given that people are buying the clothes without trying them on. Similarly, internet ticket sellers need a mechanism for providing refunds if the artist has to cancel or reschedule.

The ticketing industry, like any sector that has migrated online en-masse, has grown up from far simpler roots. Many of the people in the industry first encountered it in the days when event staging

was negligible, many ticket purchases were made on the night, and artists treated the show as a means to sell vinyl or later CD copies of their work, plus T-shirts and the like. That was a more free-booting era. There were always touts, or ticket scalpers in US parlance; the characters in the routes to the venue offering to "buy or sell" tickets, but they were tolerated, and possibly even cautiously welcomed by the primary ticket sellers. A ticket seller, after all, is in the business of selling tickets. In a multivendor scenario such as the UK, each vendor may be competing with other sellers to gain their commission, and may be at the risk of having to hand back stock to another primary seller who has sold their original allocation. The quicker they sell, other things equal, the better for them.

Some aspects of the industry, in Britain at least, still reflect this earlier era. Smaller promoters are quite often individuals who have a feel for which artists will sell, and in what quantity. Pricing is not a particularly scientific business and there is a clear but not always recognised need to ensure costs are held within bounds represented by what consumers will reasonably pay². Competition amongst larger promoters for the most popular acts plus significant risks results in lower achieved margins. Ticket sellers still rely on very near-time allocations of selling space in the venue, perhaps not receiving their share in the manifest until the evening before the event goes on sale at 9am the next day, and then in a non-user-friendly form, such as an email. Indeed, the commonly-used Friday 9am on-sale point is itself a relic of the past. But venues and artists have become somewhat more sophisticated, and particularly in the USA, there is a good deal of vertical integration, with Live Nation owning significant venues, plus a major ticketing operation (at both primary and secondary levels) and quite commonly being an artist's promoter and sometimes also their manager.

There is some vertical integration in the British market also, but venues tend to be in other hands.

This largely-siloed approach is a recipe for problems, and for the customer not being at the forefront of the industry's mind. The lesson of disruptive firms in other spheres is that they think consumer-first and use technology, including combinations of innovations, to deliver what the customer wants. (They incidentally, commonly do not think of the employee much at all, preferring a "self-employed" framework or "gig economy", and this can create legal problems in the longer term when the workers do not get a reasonable deal.) Widespread adoption of smartphones plus GPS technology, marrying

² Do you remember the occasion, or the special effects? Would the event have been much the same if the lighting was not quite as sophisticated? What venue controls am I willing to pay for? These are amongst questions a promoter needs to ask themselves in costing and pricing an event, bearing in mind the artist's appeal.

the digital with the physical, assists many disruptive players in other industries, for example Google Maps, then in turn Uber, Amazon, Deliveroo, other delivery companies and the several bicycle-rent start-ups. However, the technology lies in the background, rather than the customer needing to know the process.

The lessons for ticketing are that whilst the current arrangements may seem immutable to those in the industry, and the margins seem too small to bother, neither of these is necessarily true. What is true is that Amazon elected to withdraw from the ticketing market in the USA. They reportedly adopted a siloed approach rather than making use of the considerable customer information at their disposal and were unable to gain traction with inventory. Indeed, another disrupter, Sky Tickets in the UK, also has disappeared. But although major technology companies have failed in this market, this does not mean that the market remains impregnable to disruption. The first attempt at disrupting the UK airline market, Laker Airways, collapsed. But Ryanair and then Easyjet have carved out huge chunks of the UK and then wider European markets, focusing on areas such as Italy where poorly-performing flag carriers formerly dominated,³ adapting a model pioneered by Southwest airlines in the USA. Ryanair and others' clever use of analytics and marketing results in a 96% load factor, a major feature of their success. People may not love them, but they provide what people want.

It is also interesting that the US has a completely different model of primary ticket selling than the UK, whereby generally only one ticketing company sells most tickets for a particular venue. Presumably, on this view, a single main seller in the internet age must be able to distribute widely enough to substantially offset the potential problems of some people not knowing about the event. Indeed, a venue-based ticketing strategy makes some sense, since customers go to venues; ticketing is an intrinsic background service where it is only noticed if service is poor.

The role of ticketing brands

Essentially, as a consumer you should only notice the ticketing brand as important if it uniquely enables you to go to see what you want. People go to Expedia or Booking.com to book flights and accommodation because they provide what people want, a seamless experience, but for most purposes do not mind which delivers the experience. While constantly striving to improve, event ticketing companies often fall short in in terms of a straightforward customer experience, rather they are

³ Ryanair now has a market share in Italy of around 25%, according to OAG Schedules, well ahead of Alitalia

commonly seen as a challenge that people feel lucky to get through. The worst are slow to confirm, poor at answering emails and the phone, and slow to send out tickets. It is rare to be able to see complete availability within the venue. Yet for classical concerts, the cinema and often the theatre, you choose your seats online from a venue map and make the purchase, under clearly stated terms regarding fees etc., when you want, and receive the tickets a few days afterwards. Why the difference?

There are many reasons- one possible explanation is that some other art forms are subsidised, but this has no clear impact on ticketing strategy in popular music. Another is that venues undergo some reconfiguration for different performances, or they change how they sell based on demand for example selling "best available" for a high demand on-sale before letting customers choose their own seat once the initial demand has been serviced; however, this is marginal. But surely a third is that the music event ticketing industry has grown up piecemeal, essentially regardless of consumer desires and casual about consumer experience and venue control and instead keen on quick sales at inconvenient times. It is uncommon to have any form of automated inventory management used by all ticket sellers or an online distributed ledger to provide information about the validity of any given ticket regardless of where is being listed for sale or resale, which some may say are basic tools in improving consumer experience and confidence. A convenient fiction of sell-outs and hence the need for speed is maintained, creating a market for secondary sales by professional operators who, using computers or multiple agents, tie up primary ticketing websites at the crucial time. Some secondary sellers have a tendency to duplicity, but they do provide the service of being able to purchase at a later occasion. They also provide a guide to prices people are willing to pay, which in turn affects primary sellers' pricing strategies.

Vertical integration is not the answer. Here it is useful to discuss the experience in the US, where Live Nation permeates the entire music event industry including management of some artists, promotion, ticketing and venue ownership as well as festivals⁴. This dominance makes competition at individual stages extremely difficult. Live Nation's dominance is likely to be a key contributory factor in the high fees charged by primary sellers there.

⁴ https://www.theguardian.com/business/2018/aug/27/live-nations-grip-on-music-festivals-stifling-competition

Competition amongst ticket sellers

In an essentially market-based economic system the general presumption is that competition is a "good thing". Competition amongst sellers generally leads to lower prices and greater efficiency, since the inefficient seller will tend to lose custom to the efficient seller. The same is broadly true of the ticketing market. Here it is useful to bring out the contrast between the UK and US ticketing markets. In the US, there is one dominant player in ticketing, the aptly-named Ticketmaster.⁵ In a US Government Accountability Office (GAO) report on event ticketing published in April 2018, their investigation found average primary seller fees at 27% (p 16). The same report quotes (pp 29-30) a Department of Justice investigation that found primary sellers fees to be high due to the dominance in the US market of Ticketmaster. The UK ticketing market is likely much more competitive and has much lower fees.

At least since medieval fairs though, the idea that competition is beneficial to consumers is tempered by the potentially conflicting idea that competition requires a clear set of standards. In the medieval market, this meant a set of standard weights and measures, to be applied by all traders. In ticketing, it is also a question of what you will get for your money. This applies equally to primary and secondary markets. The "what" includes not only the ticket itself and the location within the venue, but also any conditions applied to it, when (at least approximately) it will be delivered and in what form, and a clear means of recourse if the seller falls down on their obligation, or if the event is cancelled by force majeure. Unfortunately, and despite legislation designed to give the consumer such rights, some traders particularly in the secondary market do not adhere to these conditions, so need to be forced to do so.⁶

Clearly, these conditions cannot be met through secondary sites' sale of speculative tickets, since a seat is not a homogeneous good in the way a copper wire bar is. The GAO report (pp 31-32) notes three consumer issues regarding speculative tickets: The buyer may never get the ticket, the seat location is not guaranteed, and the potential for consumer confusion (for example because tickets have not actually gone on sale at the time the speculative ticket is advertised).

⁵ Ticketmaster is significantly vertically integrated as part of the same company as Live Nation, which is a large-venue operator and concert promoter, but this is not the issue of my immediate concern here.

⁶ Despite the medieval reference I am not suggesting here bringing back the stocks!

Competition works most efficiently within a centralised marketplace, so that the consumer can quickly and easily make comparisons. The modern equivalent is the price comparison site, or some common reference system or ledger. A potential problem of competition amongst ticket sellers is that one seller may sell out their allocation whilst another seller has ample stock. Less problematic, one seller may have a cheap seat, but in an unattractive location within the venue, whilst another may have a somewhat more expensive seat in a much more attractive location that the consumer might be willing to pay a premium for. Finding and making this trade-off may be problematic in the absence of comparison sites or common systems.

In practice there are two non-monetary issues for consumer information. One is prior knowledge of whether an event will take place- is the artist touring? The second is whether there is availability at the chosen venue. Decentralised competition ameliorates the first problem, by reaching out to a wider audience, but worsens the second problem, unless there is a centralised or decentralised dynamic inventory control mechanism. Such a system could enable a consumer to see whether there was availability on the primary market, even outside of the ticketing site on which they have landed. It could be facilitated by a comparison website or in a decentralised manner.

Booking fees

Few people would object to the idea that if a seller provides an additional service beyond the basic, then they are entitled to make a reasonable charge for it. If I buy something from IKEA, I can choose to take it home myself, or ask them to deliver it, for an extra charge.⁷ What does irritate consumers is the "administrative" charge for actually being able to complete the normal purchase. This was a notorious issue in relation to "low cost" airlines, with charges for payment being demanded by some operators without there being a single reasonable means of paying without a supplement, charges for using the airport, printing at home, etc. Settling that issue took so much legislative time and effort that it is probably not worthwhile in the ticketing industry.

One solution to the booking fee issue is, rather than having a number of sellers, having a single seller but that seller being chosen by the organisers on the basis of the fee they will charge consumers, a

⁷ I could, of course, also ask them to arrange its assembly, at a price, if I was unconfident that I could do it, but so far this has not been necessary!

"Chadwick auction" in which the prize goes to the ticket seller offering the best deal (i.e. the lowest booking fee) to the consumer rather than the best deal to the venue, or the promoter. So far as I am aware, this has not been tried, although it may have been done under commercial confidentiality. An alternative is for ticket sellers to post clearly and prominently their fees early in the purchase process, enabling the consumer to make a clear decision, something that the UK has sought to address through legislation.

The problem otherwise is as follows: Suppose the consumer goes to a comparison website (assuming one exists, which it does) to make their purchase. The click-through then takes them to the ticket seller's website to complete the purchase. If booking fees are not disclosed until a very late stage and are substantial⁸, the consumer unwilling to pay such a fee faces the cost of either paying it or going back to the comparison website to see if other sellers make a similar charge, by which time availability may have changed. Technically, there is the problem, for consumers, of a Diamond equilibrium- in the face of a small search cost, faced by everyone, prices (in this case of booking fees) can be much above the competitive level from all sellers, without there being a competitive tendency to bring them down.

Do booking fees affect consumer decisions? It was argued by one market participant in the GAO report (p 44) that consumers would not change their mind about going to an event when faced with a booking fee of say 30%. It could be argued that for expensive high demand events of the type that most consumers would attend no more than twice a year that total ticket cost is more important than the split between face value and booking fee and that the impact on food and beverage spend and merchandise is not heavily impacted due to the temporal distance between the ticket purchase and attendance for these types of event. However, I would be extremely reluctant to accept this argument. Indeed, the idea is itself directly contradicted by market participants' statements earlier in the report (p 8) that, the more a consumer pays for a ticket, the less they spend at the venue on merchandise, refreshments, etc., and the fewer times they attend an event of this type.

Secondary ticketing

A primary seller (of a ticket or anything else) has the right to set a price for that item (which may be different from the price of a near-identical item, as for example in airline ticketing), and to dispose of

⁸ A common complaint relates to the high fees imposed by secondary sites late in the process.

the item as it sees fit, including imposing conditions on resale, subject to the law. On the other hand, what rights does a reseller have? Secondary ticketing is a phenomenon that attracts strong emotions.

In some corners of the ticketing market, resale is a generally accepted practice. Examples include the London commercial theatre, where agents, usually with physical offices, sell often short-dated tickets for events, enabling the casual visitor to "see a show" on that day or the next. Many of these are discounted and on average, tickets for the London commercial theatre sell at a slight discount to face value. Another generally accepted example is the resale of particular dates from a season ticket as in football, where the owner knows they cannot make a particular date within the overall programme. Several football clubs have established mechanisms for handling this.

These examples highlight the potential benefits of secondary markets. In the theatre case, with spare seats for that evening's performance, it is preferable for the theatre to discount sales rather than leave them empty, once those who book in advance to ensure their evening's entertainment have made their commitments. Indeed, there is an analogy with the practice of hotels, albeit in reverse: in retaining rooms for that night when customers turn up at the desk, the organiser is trading off a definite sale earlier against a higher price later, but with only some probability of selling the room. In the season ticket case, the season ticket holder's known absence means the seat would be empty but retains some prospect of being filled by another supporter of the team.

It is also notable that particular artists who have an aversion to "touts" and secondary ticketing are commonly amenable to resales with a cap of e.g. 10% above the original price (and possibly less than the original price) through authorised secure exchanges such as Twickets - Ed Sheeran provides such an example. Such a mechanism ensures that purchasers who genuinely intended to attend, or a close associate of theirs who they failed to get to attend, are able to achieve some recompense and at the same time allow someone who failed to obtain tickets originally to attend the event. This strongly suggests that the aversion is not to the principle that a ticket cannot be exchanged/ resold, but rather to the idea of a buyer deliberately amassing significant stock for profit, tying up primary ticketing websites. This is likely compounded by the secondary ticketing site also adding a substantial fee onto the price the broker / seller set. Indeed, FanFair Alliance state on their website that the problem they identify can be summed up in two words- ticket touts.

Incidentally, something that is puzzling about the secondary market is why the percentages added on as fees are so high (secondary fees in the US are on average around the same level, but they are barely different from primary fees, according to the GAO report), yet have not been reduced through competition between sites. One plausible reason for high secondary fees is payments for prime listings on search machines; another is unreliability amongst their large-seller "communities". "Ethical" sites can work on much smaller margins yet remain commercially successful from both consumers and consumer advocates.

Overall, this suggests a nuanced view of the secondary market in which some advantages should be recognised, but these are not necessarily sufficient to outweigh the disadvantages of consumer confusion and feelings of being "ripped off". Secondary sites that are approved or authorised by organisers and set a cap on ticket prices, together with low fees, are subject to broad approval and following the closure of Seatwave and GetMeIn all UK primary vendors now operate capped resale.

Here it is worthwhile distinguishing between the concept of value and the concept of price. Adding to the price of an item is not the same as adding value. Arguably, adding liquidity to the market adds value - it means that someone who finds out well after the on-sale date that they can after all attend an event, has some chance of doing so. A secondary seller also absorbs some of the risk otherwise assigned to the promoter, thereby acting as a form of insurance - they may find they need to price below face value in order to cut their losses when they mistakenly thought demand would be stronger than turns out to be the case, but can recoup this in cases where demand is strong. Simply adding a significant premium through immediate purchase and then resale on the same day does not add value, though it may add considerably to price and to the reseller's income.

These remarks suggest that an outright ban on secondary sales leads to losses that the secondary market or more flexible arrangements can alleviate.⁹ Yet on the other hand, actions through the secondary market can make it more difficult for consumers to purchase tickets in the first place and can lead to gains for people who have no interest in the product itself but simply view it as a money-making mechanism. Secondary sales may make the market less transparent to consumers by implying no primary tickets remain available. Worse are the bad actors who take advantage of consumer lack of knowledge to "sell" a product they have limited intention of delivering - rare but extremely frustrating. Added to this, the high fees charged by many secondary sites, together with the aggressive tactics some platforms use and the opacity of who the ultimate seller is, lead to a negative feeling about the secondary market process as a whole.

⁹ On this point, see Courty (2017).

At the same time, there are also events where secondary ticketing might be generally viewed as inappropriate or even immoral by most consumers. For many events, the artist has views on the nature of the audience that should ideally be taken into account in the nature of any resale. The Pope, giving a mass audience that is ticketed for convenience, surely does not wish the tickets freely given out to applicants subsequently to be sold on a secondary platform, for example. Promoters of an event organised to benefit a charity may disapprove of others making money through reselling entry to the event.

Efficiency versus equity

There is a powerful view amongst consumers that equity matters in event ticketing- this can be seen through the many newspaper exposés of high prices on the secondary market for popular events. The secondary market, by contrast, is firmly located in efficiency in the sense that those people who pay the most for a ticket are those for whom it has the highest value. Neither position is entirely clear and logical.

The nature of the primary ticket market, which has the feature of persuading people to purchase quickly for an event many months' hence, is likely to lead to a proportion of purchasers making decisions they later regret, or timings they are unable to make. Evidence that this is the case comes from the North American academic literature and GAO report but also, closer to home, the fact that many of those who make their way through the first stage of the Glastonbury on-sale decide not to take up their option (and hence lose their deposit) when the next payment stage is reached. In such cases, these tickets are of course recycled since there is normally excess demand.

Most consumers would accept that secondary ticketing sites which price at a maximum of, say, 10% over face value provide a useful service. It follows that the concept of reselling tickets is not the issue which excites the public imagination, but rather the means of sale and the price premium charged by fully commercial secondary operators (particularly for events where there is a specific societal element to the performance, such as charity concerts). This opprobrium, incidentally, extends to the actions of those who hold debenture rights to particular seats at venues such as the Albert Hall, as well as the more general opportunistic resellers.

However, the flaw in the secondary market position regarding efficiency can be explained as follows. Suppose that everyone had the same overall income. Then if I choose to buy a ticket to a particular event with my money, rather than spending it on a special meal out, for example, I value the ticket more than the meal out, whilst someone else might value the meal out more highly. Then it is efficient if I outbid the other person for the ticket, as I might do through the secondary market. The efficiency argument carries less weight once we move to the reality of widely differing incomes. I may be willing to pay a relatively higher *proportion* of my income on a ticket than someone else yet be outbid by that person because they have a substantially total greater income. In a sense, I value the ticket relatively more highly, but fail to get it, so is this efficient? Or fair?

There are problems with the equity argument also, though. Most people would prefer to be in the first few rows of the audience for an event.¹⁰ So if a ticket in row 5 is priced (almost) the same as a ticket in row 45, is this equitable? Possibly it is if the person who gets the ticket in row 5 does so because they were amongst the first 100 on the website, having prepared thoroughly. But are they worthy of being favoured if they happened to be on the website five seconds before the person who gets the ticket in row 45, who also prepared thoroughly? There is also the question of fan club presales, venue partner/ sponsor presales and other effective purchase limitation mechanisms

Some events solve the problem by having tickets at a wide range of prices across the venue, with those likely to be more valued being higher priced. In principle this can meet both efficiency and equity concerns (in the economic jargon, prices can be Ramsey-optimal). It is common, of course, in theatres and for classical works such as opera and ballet and is used by various football teams (e.g. Barcelona). It is not favoured by music events, on the whole, because the performers actively involve at least the first few rows in their performance (rather than, as in classical works, where rapt silence is the norm), so if the occupants of those seats are (rich and) staid, the performance is less exciting for all.

An alternative means for tackling the problem is for those seats likely to be most valuable to be subject to a ballot amongst longstanding fans, so luck plays a part. This neglects the efficiency side of the trade-off in favour of the equity side, and also requires measures to prevent the lucky ballot winners subsequently selling their tickets to the highest bidder.

A third issue is that the secondary market relates to short-term efficiency, pricing of tickets for this particular event. There is no concern for the possibility of building an audience for the act by pricing low to attract new people to experience them. If I am not sure whether I will like an act, I will be willing to pay less than someone who is sure, and that person can outbid me even if our incomes are similar,

¹⁰ Maybe not the first row, but certainly near enough to see the expressions on the faces of the performers, i.e. no more than 15 meters away

since my expected benefit is lower; but from the artist's viewpoint the subsequent expanded group of enthusiasts may be more valuable. Long established acts commonly grew up through a system in which prices were lower in real terms, so they built their audiences over time, whereas newer acts do not have that luxury.

The general point to be drawn from this discussion is that there is no obvious holistic means of tackling the equity-efficiency trade-off. But the issue needs to be considered, so that rules applying to the ticketing distribution strategy meet the artist's and audience's expectations as fully as possible. Typically, and particularly at an early stage in their career, artists have a specific view on which categories of consumer they would like to privilege in attendance (for example, longstanding fans). Whilst I would not argue for the moral right of artists to extend beyond asserting their right to control dissemination of the event through unauthorised recording, etc., to who *specifically* attends, it is clear that artists, and the audience, benefit from a lively event.

The role of technology in solving ticketing challenges

In the 19th Century, and into the 20th, it was common to endorse a cheque, bond or even a banknote. This was done by writing your name and signing on the back. Endorsement enabled transfer of the instrument from one person to another and, if the seller (or an individual earlier in the chain) was of some standing, provided assurance as to the provenance of the instrument. This is much like the endorsement of an expert in art history as to who painted a particular work of art, relying in both cases on reputation and potential reputational damage or even recourse if the decision is later seen to be wrong. Of course, it was necessary physically to see the item so as to verify its provenance.

Passing it from one person to another allowed value to be given in exchange. No overall picture of the current location of the instrument was feasible; something that was convenient for some of the (tax evasion) purposes to which the system was put. Title to the rights conveyed by the instrument went to the bearer. Many people nowadays essentially view the bearer as having the rights conveyed by a paper ticket for an event, regardless of whether or not they have printed it themselves, although legally this is unclear.

When a transfer occurs only once, from primary seller to someone who buys it as a revocable licence, on the other hand, the original issuer of the instrument can maintain a ledger of who bought it. The seller can (but often does not) later make checks that the person who has it in their possession when they wish to exchange it for something of value (like entry to an event) is that same person to whom it was issued. But some tickets are likely to go unused. Secondary ticket sales through an independent platform mean that the original issuer of the ticket loses control over and oversight who has it in their possession. Moreover, a secondary ticket purchaser faces two potential (connected) problems. First, they don't necessarily know much about the seller or the conditions under which it was originally sold, or previous links in the supply chain when handing over money and waiting for their ticket -they may rely on the intermediating platform to engage in checks. Second, if the ticket is electronic, they may not be aware that what they will receive could be a duplicate, something known as the "second spending problem"- digital items can be infinitely produced at minimal cost. The original seller meanwhile, may not be aware of the conditions under which the ticket was resold, and may disapprove of the actual conditions, for example a substantially enhanced price or sale of a ticket intended for a disabled person to one who is able-bodied.

Technological solutions to this problem exist, and some are now being adopted. These can be divided into two types. One, relevant where there is 100% ticketing control at the venue by a single primary seller, is essentially an electronic form of the Glastonbury mechanism- any unwanted tickets go back to the original seller for recirculation to new buyers. Flashseats, used by AXS, and Ticketmaster Presence are two such streamlined examples. However, these do assume a single primary seller and bring with them the prospect of reduced competition in the ticket selling marketplace.

These issues can also be solved through a blockchain mechanism, which can easily incorporate several primary sellers for the same event through an open source protocol. Therefore, it allows for competition between sellers. Wikipedia defines a blockchain as "a growing list of records, called blocks, which are linked using cryptography. ... Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data... [The block] can record transactions between two parties efficiently and in a verifiable and permanent way" Therefore, it assigns title rights dynamically.

A distributed ledger (such as Blockchain, a particular type of distributed ledger¹¹) has the potential to solve these problems by marrying the endorsement concept with the ledger concept and furthermore

¹¹ Here I am adopting the classification of Shaan Ray (2018), for example, which makes clear that a blockchain is a subset of the class of distributed ledgers: "Every blockchain is a distributed ledger, but not every distributed ledger is a blockchain. Each ... requires decentralization and consensus among nodes. However, the blockchain ... updates the entries using an append-only structure."

making the history of transactions publicly observable (not just observable to those who hold the ticket or other entity). A blockchain has an append-only structure whereby the previous record cannot be erased, making it immutable. This is advantageous since any transaction can be checked, challenged and annulled if generally accepted as false. The most up to date version of the ledger consists of an accurate record of title to ownership which can be verified on final exchange.

Thus a blockchain will always incorporate the record of who owns a ticket (or other entity), together with the details of who its previous owners were. Moreover, rules in relation to a particular event can be set, imposed and applied to transfers, presumably including rules about the categories of people to whom the ticket may transfer and at what price or price range. For example, it could incorporate the rule that if the owner cannot attend, they must transfer the ticket back to the original seller for redistribution or for on-sale at no more than a particular price. Thus, a blockchain system enhances control within the market for a particular event, to consumer benefit.

It is clear that blockchain solves the problem of fraud in a similar way to which an airline ticket code does, but in addition can be seen by all parties to the transaction. If I buy an airline ticket from a website, it gets assigned a unique code. I can check (and the airline can check) this to ensure it is genuine. In the case of a blockchain solution, others can verify it as well.¹²

Blockchain also solves the problem of speculative tickets, where some agents assume they will obtain tickets and sell them before they are issued. A speculative ticket cannot be assigned a code and therefore cannot be sold (to any person who is aware that the code is essential and unique).

To complete the circle, the provenance of the ticket needs to be checked at the venue (such as by an access control app), where it is exchanged for ultimate value; ingress. This requires a compatible system in place at the venue. Otherwise, someone who does not own the rights conveyed by the ticket may be able to obtain entry by maintaining they do have those rights. This is no more than an example of the principle that a chain is only as strong as its weakest link. But it does mean that venue adoption is a key element in preserving the blockchain.

¹² If I want to buy a second-hand mobile phone, I can check (for a small fee) whether, for example, it was stolen or has outstanding payments required on it. A blockchain does this, and more, for a ticket.

In all this, it is important that the ticket purchaser does not need to know anything about the complex mechanics/ science underlying the blockchain and the virtual currency which supports it, any more than they need to know about the nature of electricity generation when turning on a light switch to illuminate the room. To them, it is enough that the light switch/ ticket purchase works and is simple to operate.

At the same time, there are potential difficulties arising from the nature of the practice of ticket purchase which must be borne in mind. It is important to discuss two particular practices. First, people commonly want to buy a small block of tickets, say 2 or 4 in a row, so that they can make a social occasion of the event. The common way in which this happens is for one person to make the purchase and then to transfer the ticket (rights) to the others in their party. The other practice is purchase by a parent, e.g. for a teenager and her friends who wish to attend an event that the parent who is paying will not attend. The difficulty is that mechanisms to allow these transfers can be used to circumvent rules that the primary seller, representing the artist, wishes to enforce. It is easy in principle for a purchaser to maintain that they are buying tickets for "friends" yet wish to transfer some or all of the tickets to contacts via, for example, social networks; maybe even walking them into the event. However, there is then a side transaction at the time of handover which breaches the rules proposed by the primary seller (a recorded transaction within the rules is coupled with an unrecorded money transfer in person to the original purchaser). The "teenager problem" is clearly even more susceptible to nefarious practices.

These problems are preventable, with care. The "teenager problem" is easiest to solve, requiring the purchaser to nominate the ultimate recipients of the tickets immediately on purchase. Transfer at zero cost can be enforced. Ultimate delivery can then be to registered mobile devices owned by the teenagers. The "friends" problem can similarly be solved by the purchaser nominating the ultimate users, within a given time- period, together with their registered device and with the transaction enforced at, say, face value plus booking fee. If the purchaser is unable to do what is required within the event rules, the tickets would then be revoked and refunded (possibly with some administrative fee applied) and reallocated to a random recipient on a waiting list for the event. Note the importance of randomness here, rather than a specified recipient, to avoid side-payments taking place. More generally, any reallocation apart from the above specific examples, e.g. resulting from inability/ unwillingness to attend discovered at a later date, should be to a random/ anonymous recipient

through the system¹³ (assuming sufficient demand), and subject to its rules. In fairness to the original purchaser, and by analogy with airlines, consideration should be given to refund for any reason within say 24 hours of purchase. It is somewhat surprising to me that, whilst purchasers of a good or indeed many services such as insurance are normally given the right to change their mind, purchasers of a ticket are not given those rights.

Conclusions

My feeling is that the event ticketing market will change. In part, it may change in what some would consider for the worse, with more finely graded pricing, both within a venue and dependent on when a ticket is purchased, just as has happened in the airline, hotel and car hire businesses. Whilst this may be inevitable, I would caution against the industry becoming too commercial- the events in question are social celebrations as well as commercial opportunities. Ticketing itself is ultimately a commodity business, and I would expect margins in resale to fall and perhaps the distinction between primary and secondary sellers to become blurred, as looks to be happening in the UK with Ticketmaster shutting its secondary websites and facilitating resale (as well as the more controversial premium sale) within its own site. But the greatest change is likely to come in the form of technological developments, both in gathering information on likely demand and gauging the nature of the event (series) based upon that and in finding and in ensuring efficient delivery of events to consumers through seamless ticketing systems. There is a clear need within the industry to think through analytically the artist's likely audience, potential venues to suit at different locations, ticketing pricing and distribution strategy, and venue control, as an integrated whole prior to the series of events, rather than as separate elements. These all need to be planned with the consumer, not the industry, in mind. Technology is there not to incite resistance, but to offer assistance.

¹³ See Pascal Courty (2017) for mechanisms designed to restrict resale

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