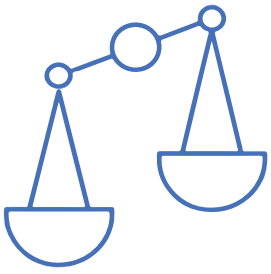
Part 3: **Capturing (and Locking) the Value: How Is Value Captured?**



7 Brokerage Model: Scaling with Fees on Marketplaces?

Commission fees are considered as the most developed and even sometimes successful model to capture value in marketplaces. Sometimes called "transaction fees", "take rate", or "rake" or "service fees", commissions are capable of minimising frictions in marketplaces. Transaction fees can be adjusted to attract both sides of the marketplace and solve the mutual baiting issues. This mode of value capture presents the advantage of exponential profit growth when scaling, provided variable costs are kept under control. Using AirBnB as a central case throughout this chapter enables us to analyse and illustrate the benefits and challenges associated with this value capture mechanism.

7.1 Why are Transaction Fees so Developed?

An internet transaction is the sale or purchase of goods or services, whether between businesses, households, individuals, governments, and other public or private organisations, conducted over the internet. In 2020, over two billion people purchased goods or services online, and during the same year, e-retail sales surpassed $4.2 trillion worldwide. Those transactions generate fees which may be visible or invisible to the users. This is the case of marketplaces like Airbnb, Amazon, Apple Store, Blablacar, Etsy, Uber, Zalando, and so on. If transaction fees are not the sole way to charge participants and customers, they are among the most dominant pricing mechanisms–namely the type of value capture behind the business model– at work in marketplace configurations. A recent study pointed out[1] that more than 50% of the "100 best performing marketplaces in 2021" take a cut out of the transactions they process.

The transactional business model can be considered a taken-for-granted marketplace model whereby two sides (i.e., buyers and sellers) engage in a transaction and thus generate revenue for the marketplace provider. The value is captured by charging one or both sides a service fee, a commission fee, sometimes called a "rake", on each successful transaction.

The "rake" analogy is interesting, as it reveals why this pricing tactic spreads among marketplaces. As Bill Gurley explained, "In a casino, the term 'rake' refers to the commission that the house earns for operating a poker game. With each hand, a small percentage of the pot is scraped off by the dealer, which in essence becomes the 'revenue' for the casino". Like a casino, a marketplace provider

1 See ShareTribe insights accessed in May 2022.

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creates the conditions by which all the participants– at least a seller-side and a buyer-side– want to interact and transact. For their effort and just like the dealer in a casino, these providers capture a little bit (e.g., the commission) of the revenue passing through (e.g., the transaction).

Let us take Airbnb as an example. Originally named AirBed&Breakfast, this business was presented in 2008 and their pitch deck got viral and influenced numerous upcoming entrepreneurs.[2] Behind their well-known solution – "a web platform where users can rent out their space to host travellers" – founders stated simply their business model as such: "we take a 10% commission on each transaction". Let's assume that one transaction corresponds on average to three nights for $70 per night – or $210 – the company will take a $21 commission per transaction. Based on an estimated 10.6 million transactions in the next 3 years, AirBed&Breakfast could achieve more than $200 million in revenue–not bad for a startup with a relatively limited upfront investment – i.e., contrary to a traditional hotel chain, it does not need to pay for the building of the actual offering (e.g., hotels and hotel rooms). As we will see later, the "business model" is a bit more complex, but what can we learn from that example?

At the Essence of Two-Sided Markets

Theorized by French economists, the Nobel laureates Jean Tirole and Jean-Charles Rochet, two-sided markets are at the foundations of digital platforms, as presented earlier. They refer to a situation in which two distinct user groups (sides) are interdependent on interaction (buying and selling for example). To enhance network effects, an intermediary– the platform provider– will have to create favourable conditions to remove frictions to meet, interact, and hopefully transact. This intermediary transactional platform is accordingly supposed to function as a facilitator – often called a matchmaker – to foster the willingness of the sides to meet and transact.

Thus, charging a fee for each transaction is supposed to support the efficiency of the intermediation provided, as it will take a small commission on the effective transactions performed. Individually, each commission represents an acceptable and small compensation for the effective matchmaking (e.g., a 10% compensation for securing the transaction between a host and a traveller for AirBed&Breakfast). But on a large scale, these small commissions can represent a huge revenue stream, once the provider reaches a significant market share (e.g., $200 million in expected revenue from 2008 to 2011 for AirBed&Breakfast).

2 See this BusinessInsider Blog Article published on March 28, 2015 – accessed in May 2022.

As the platforms' key attribute is to remove frictions in the matching and interaction of two sides, it is essential that the pricing mechanism does not reintroduce such frictions.

Capturing Value from a Frictionless Transaction and Brokerage Model

Instead of buying products and reselling them, brokers function as an intermediary or third-party who brings sides together and removes the friction in transacting. The goal of the broker is to hopefully become the "one-stop shop" for buyers; and the place to be listed for sellers. So, to justify the 10% commission fee, we need to understand how the job is performed by the web platform. In the example of AirBed&Breakfast, the platform provides three key features for travellers:

- Travellers can search by city and curate the listing according to filters.
- They can review listings: each reference can be described according to a text, pictures, a functional description, and reviews from previous travellers – which play a key role in continuously updating the description of each listing.
- They can book directly on the web platform, whether or not the currency of the host and the traveller is the same. The website secures the transaction for both participants, as it ensures the role of a bank in settling the transaction.

This last attribute of the process is key for AirBed&Breakfast. If it did not control the flow of money, it would not be able to ensure that both participants pay a commission.

LeBonCoin, on the other hand, is a classified ads website based on free service for individuals and the matching of local supply and demand. In this model, buyers and sellers are put in contact through the website but the money flows directly from buyers to sellers without the intermediation of LeBonCoin. In this case, it is not possible to secure the conditions for a commission. That explains why LeBonCoin prefers to value the exposure from the audience to advertisers and function as a third-party subsidy business model that we will discuss in Chapter 8 on free-based business models.

Providing enough value for participants is key to sustaining a commission model. If the participants can interact directly – especially for the payment – then the platform may lose its pivotal role in the brokerage ecosystem model. In our example, AirBed&Breakfast re-intermediated the market with transactional ease of payment combined with trust mechanisms (ratings of hosts, travellers and offerings). Airbed&Breakfast acts as "insurance" for both parties and as such, justifies the commission fee.

A One-Fits-All Pricing Strategy for Marketplaces?

As stated by ShareTribe in their survey,[3] commission fees are dominant for rental marketplaces and marketplaces selling physical goods. Whereas for the other kind of marketplaces, such as for digital goods and contents, or service, and delivery marketplaces, ShareTribe notes "a spread of successful revenue models" including subscription, freemium and lead fees, and other kinds.

As explained earlier for rental services, such as Airbnb, the trust issues justify the brokerage model. For marketplaces selling physical goods (such as Amazon for example), the service fees need to encompass the shipping process where the e-commerce will release to the seller the details for the shipping to the buyer, the seller performing the delivery directly. Thus, the platform provider is locking in the seller by mastering the customer relationship management, justifying and securing the commission. If a transaction is recurring between the same buyer and seller for the same good or rental, then buyers and sellers will be tempted to bypass the marketplace.

For digital goods and contents, value capture may also be different. Sometimes, the dominance of the platforms makes it possible to charge larger fees, as much as 30%, as in the case of Apple. The mimetic movement for spreading the commission fees from music to applications was successful, as it was well-adopted by the ecosystem of stakeholders. Whatever the nature of the transaction, the effects were a quick scale of catalogues and consequently, a solid revenue for the platform providers as the number of transactions grows and the platform reaches a dominant position. The example of Apple is developed hereafter, concerning two different services: iTunes and App. Store.

Apple iTunes vs. Apple AppStore

Released in 2002, iTunes rapidly became an extremely popular marketplace for buying music to be downloaded on an iPod (a portable media player) released by Apple by late 2001. At this time, the music industry was still dominated by CDs. Thus, purchasing music as a physical good was the dominant model. To enhance the move to digital, Apple engineered an interesting business model for iTunes. On the one side, we find the copyright owners – major labels and distributors such as Universal, Warner, and EMI, with a dominant position in the industry. At 10 to 15€ per copy, they were benefitting from the CD format. The challenge for Apple with iTunes was therefore to convince them to disseminate electronic copies of their catalogues without a risk of music piracy. Then Apple needed to change consumers' habits to wean them away from CDs to purchasing digital copies. In that context, Apple fixed the price for every single to be sold on Apple iTunes at 0.99€ per song. A price per song was appealing to the listener, who did not need to buy a full album. This pricing was also considered fair and beneficial to the owners, as on average, an album comprised 12 to 15 songs – thus, the price of an album would be comparable, as Apple promised to integrate a Digital Right Management to secure each copy sold online exclusively through the Apple iTunes platform. On the volume of sales, Apple split the

3 See ShareTribe insights accessed in May 2022.

revenue generated with Majors on a 30/70 split agreement: Apple's retaining a commission fee of 30% of the revenue was justified by the costs of distribution (storage, security of digital content and platform, marketing, and payment costs). iTunes was an enormous success for many years and an accelerator of progress from an analogic industry to a digital music industry, opening up avenues for streaming platforms.

Several years later, in 2007, Apple introduced the first iPhone, replicating the model it had already tested with iTunes with some slight differences. Along with the iPhone, the AppStore was launched as a marketplace. iPhone owners could browse and download approved apps developed for iOS (the operating system embedded in iPhones). App developers could access Apple iOS SDK (i.e., the Software Development Kit) and access all iPhone customers if they respected Apple's conditions of sales and use.

Yet, contrary to the iTunes business model, this time, Apple did not fix the price of Applications, due to the competitive conditions of the application industry. Unlike the music industry, the application development sector is highly competitive, the players numerous and fragmented. Accordingly, the conditions are very competitive to ensure that the laws of pure and perfect competition are fulfilled and accessible pricing for the buyers (iPhone owners) is possible – to the extreme, nowadays, we observe that a large majority of Apps are offered for free.

Reproducing a "fair pricing brokerage model", Apple let developers fix the price of their apps and split the revenue under the 30/70 rule: 70% of revenues for developers for paid apps and in-app purchases and 30% for Apple to cover service fees. Again, it was a tremendous success for Apple. It permitted Apple to quickly scale the catalogue of applications developed in the iOS ecosystem, faster than it could have taken for Apple to develop on its own all the applications available in its closed ecosystem.

Finally, for delivery services, the platform provider must intermediate three sides (e.g., restaurants, customers, and riders for Deliveroo or Uber Eat) and conditions to transact can be made complex with other kinds of pricing strategies.

If the mechanism for "commission fees" appears simple in principle, its practical application may be more complex.

7.2 Who is Willing to Pay the Bill?

Behind the lure of scaling of revenues, the way service fees and commission fees are split among sides plays a vital role in the success or failure of marketplaces. Traditionally, the pricing level should be directly related to the consumer's willingness to pay. For the brokerage model, the fees need to be paid by one side or both sides proportionally to their willingness to use the service.

Coming back to AirBnB, the initial and symbolic 10% commission on each transaction evolved over time. Today, the fees ranging between 7 to 15% are supported by the traveller-side (guests) (according to Airbnb, under 14.2% in most cases), whereas hosts contribute 3% from their side. The communicated "10% on average" may end up being much more (at least for the platform), as the cost may be supported by both sides (see Figure 7-A).

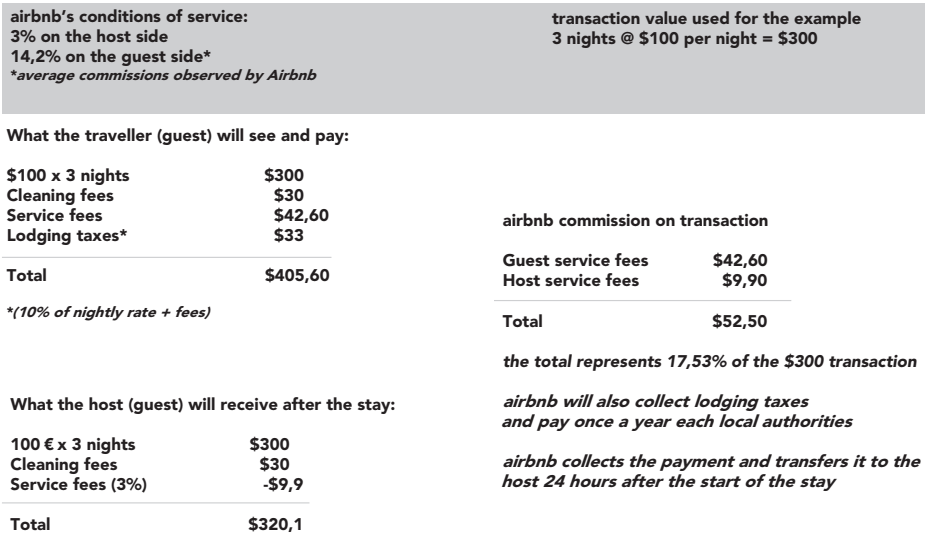

Figure 7-A: Breakdown of a Typical Transaction on Airbnb.
(Example based on dummy data)

Avoiding the Chicken and Egg Issues with Fees

Defining the billing process requires the platform providers to perfectly know the characteristics of the markets (sides) they are intermediating.

Then, different options are accessible for the platform provider to capture the value of the interaction enhanced: charging one side or splitting the commission between sides.

In the design of the pricing strategy, the challenge here is not to introduce frictions with applicable fees to join the platform and trade (transact). Pricing is part of the marketing mix, along with products and services, communication, and UX on the platform, and must bring liquidity and transparency for the participants, to avoid the chicken and egg issue.[4]

Pricing will play a role in the mutual baiting problem. Subscription fees or listing fees, for example, should not represent a potential obstacle to joining.

At the nascent stage of a marketplace, the platform is "supply constrained": No listing of restaurants on a food delivery app, no drivers available on a taxi app, and no hosts on a rental app will make it impossible to attract potential customers on the other side. Hence, the platform provider may have to provide its services on both sides for low fees or no fees.

4 See Chapter 2.

To charge the supply side, platform providers need to know their dependence on the trading service provided. In the case of Airbnb, hosts have an alternative in the form of real estate agents, who traditionally play the role of brokers but with a more limited audience. Usually, they take a 4% commission per month to manage the rentals for hosts. Positioning Airbnb just under this competitive price (3%) was a necessity to be attractive. Moreover, beyond the access to a larger audience of potential guests, the service provided by Airbnb permits benefiting from a landing page and back-office tools (calendar to manage availabilities, seasonal pricing management tool, message interface, smart pricing suggestions, a third-party insurance system, secured payment logistics, etc.) to position their ads on the Internet. Thus, the conditions of fees are made frictionless and worth the investment, as they extend opportunities for maximising the property occupancy rate.

In the initial phase of development, very few platforms are "demand constrained". Accordingly, a large part of the marketing effort is oriented towards the buyer side to invite them to scroll and search for the perfect good or service to transact. The challenge here is at the check-out, where service fees listed beyond the raw price of the transaction can introduce a barrier to an effective transaction.

Here, the psychological price acceptable to the buyer is a combination of several elements relative to the nature of transactions (e.g., including speed shipping for eCommerce platforms, trust mechanisms in rental services, easiness of booking and payment for a taxi app) and the value perceived for the brokerage activity performed.

The fee mechanisms along the way of scaling will gradually become more complex. Data analytics help the platform provider to complexify the conditions of commissions: a split changing over time, differentiated segmentation based on the level of usage-based or based on loyalty, etc. The provider can test different alternatives with the hope of securing revenues and being less dependent on the Gross Merchandise Volume growth rate.

7.3 Pricing: The Influence of Competition and Cost

Defining the optimal level of commissions and their split among sides is an equilibrium exercise. Several contracting forces will determine the optimal price.

A Competitive Pressure

Multihoming is an established practice on the Internet. It consists of registering with several services offering similar solutions. For example, many Internet users subscribe to different cloud services such as Google Drive, One Drive (Microsoft), DropBox, or Apple iCloud. The same exists for buyers and sellers on marketplaces.

A seller will list its products on Amazon, eBay, maybe Etsy, and potentially its own eShop powered by Shopify. A traveller may search and review on Airbnb, Booking.com, and Tripadvisor, while a host may propose rooms via Airbnb, Homelidays, and Booking.com. Accordingly, fees are subject to competitive pressure, and whatever is the value perceived, these tend to lower commissions. Commoditisation is a huge danger for all marketplaces—a point where participants do not really see the differentiated value from one marketplace to another. In such a situation, platform providers enter a "red ocean situation", as described by Kim and Maubourgne, authors of the bestseller *Blue Ocean Strategy*. In this situation, competition is typically fierce, and all companies are fighting to solve the same problem or meet the same need; very often the only way to gain a percentage of market share is to battle prices.

Fees can be a differentiator in attracting and reducing switching costs. Conversely, transaction fees alone are less effective in retaining customers. Hence, it is important to see the "lock-in effect" of a pricing strategy such as for the non-financial attributes of the platform. The more a participant engages (creating an account, uploading content, searching, connecting often, transacting often, etc.), the more (s)he is locked into the service. Customers are eventually locked into a vendor's world of products and services. Switching to another vendor is not possible without incurring substantial additional costs. Apple locks-in users of its Macbook, iPhone, and iPad because they share a common operating system, which makes syncing data between each device very easy and syncing with third-party systems such as Android rather inconvenient or impossible. Another way to lock in users is to perform the razor and blade strategy. This strategy, whose name can be traced to Gillette's practice of charging a low attractive price for the razor and higher price for blades, is now used in other industries too. Canon, for example, takes advantage of digital technology to sell ink printers at fair prices and charges very high prices for replacement ink cartridges, which are automatically ordered through the Internet, once the ink runs low.

Covering the Platform Costs

To enter a market (e.g., e-commerce, taxi apps, digital goods marketplaces, and delivery apps), insurgents engage in a "blitzscaling strategy"[5] with the hope of getting over the crowd before running out of cash. This strategy allows them to rationalise their pricing strategy according to the expectations of investors to see the accrual of profits. What is at stake here? The Profit Formula is quite simple (see Figure 7-B).

5 As defined by Reid Hoffman and Chris Yeh in their book: 'Blitzscaling: The Lightning-Fast Path to Building Massively Valuable Companies', Currency, 2018.

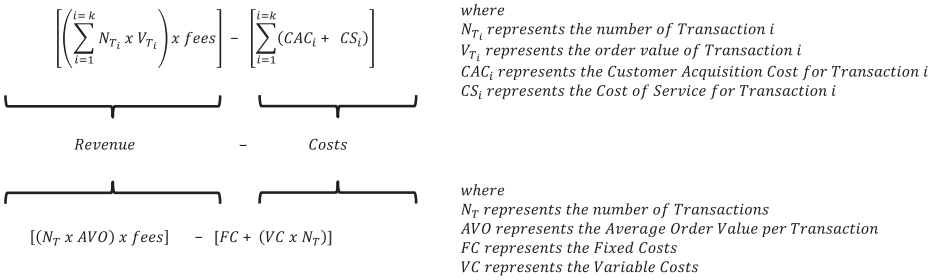

Figure 7-B: Simplified Profit Formula for a Brokerage Model.
(Adapted from our fictional example)

As we can see in the simplified profit formula for a brokerage model:

- options to increase revenue rely on the left side of the formula:
  - increasing the Number of Transactions (N_T) and/or
  - increasing the Average Order Value (AOV) per Transaction and/or
  - increasing fees
- whereas, to improve profits, you can also (maybe even need) to maintain costs:
  - limit Fixed Costs (FC) and reduce variable costs (VC)
  - reduce the Customer Acquisition Costs (CAC), play on word of mouth and referrals, and develop inbound marketing instead of outbound marketing tactics.
  - reduce the Cost of Service (CS), by playing on automation of processes to avoid a trader behind each transaction.

The major issue is that a large part of FC is supported at the beginning of the entrepreneurial journey (e.g., development of the platform) and CAC and CS are higher at the beginning due to a lack of efficiency in operations (economy of scope and experience). Sustaining and winning the battle of establishing the positioning require a lot of working capital and the backing of investors. Amazon waited till 2001 to generate its first operating profits. It took 16 years for its profits to cover its peak cumulative losses of $3 billion. Equally, it took 8 years for BlaBlaCar to generate its first profits. The tipping point of revenues and breakeven is hard to find, and it requires considerable energy for entrepreneurs to financially achieve the potential of network effects in their markets. Nowadays, BlaBlaCar represents a community of more than 100 million users (drivers and passengers) worldwide.

In the UK, BlaBlaCar fees are between £2 and £9 depending on the price of the ride. This means that the margins are low and could be easily eaten up if VC get out of control. To sustain profitability, BlaBlaCar relies on automation. About 98% of transactions are effective and without incident. Still, customer service represents one-seventh of its workforce (700 employees). This makes customer service at

BlaBlaCar one of the most efficient, as each customer service representative is on average and theoretically responsible for a million users!

Transaction Size and Volume Matter

By design, revenues for digital brokers and marketplaces adopting fees are intrinsically correlated to the AOV and the number of transactions. To continue with the example of Airbnb and BlaBlaCar, the average order value is no comparison between the two companies. Airbnb generates an average transaction of more than $200: users book for a weekend (two nights) or a week (five nights) for an average cost per night of $70 initially but rising continuously since then. The carpooling service promoted by BlaBlaCar generates an average transaction of 13€. BlaBlacar does not charge fees to drivers who will get "the exact amount they set when offering a ride" – as pointed out in BlaBlaCar conditions of sale. For most markets, BlaBlaCar charges between 0 and 30% according to the order value with a minimum of 1€. Thus, each transaction on BlaBlaCar generates on average 2€ – which is 10 times lower than Airbnb commission fees or, put differently, BlaBlaCar needs 10 times more transactions to generate the same revenue. Nevertheless, the business architecture remains as complex and difficult to scale as previous developments demonstrated.

Entrepreneurs eager to develop a digital service and a viable business model need to consider a sustainable and scalable business model capable of generating recurrent revenue that will lead to profitability. It may not be viable immediately, as business models may evolve over time through trial and error. BlaBlaCar, which is present in 22 countries, tested different business models over time and geographical markets. Business models are organic and must evolve over time according to the characteristics of the markets and their participants–so too are the digital business models; and, among them, the brokerage model, which is enticing as it is simple and frictionless to scale and yet also needs to be tested and fine-tuned over time.

7.4 Key Takeaways and Further Considerations

1. Fees can be seen as a frictionless pricing strategy for digital platforms and marketplaces.
2. Fees should entice fluidity in the marketplace and reflect transparency.
3. The value of the brokerage activities justifies the value of the fees.
4. The pricing strategy and value capture mechanism should be adapted to different market configurations.

Airbnb: Fees are Moving, Does it Change the Business Model?

The pandemic has grounded travellers and business trips for the last two years: bad news for AirBnB. Research by the analysis website AirDNA showed bookings in some cities to have fallen by as much as 96%. But even before this, AirBnB had experienced some level of difficulty. For example, many voices on social media have criticised the balance between the price per night listed and the effective guest price paid per transaction, which can double with local taxes, cleaning fees, and of course, service fees.

In parallel, Airbnb revised its pricing policy in 2020 with the "Airbnb Simplified Pricing". This is what the Airbnb website says:[6]

> Historically, Airbnb has had a single fee structure for all hosts, in which a service fee is charged to both the host (3%) and the guest (under 14.2% in most cases). Last year, based on feedback from many professional hosts, we launched a new fee option for software-connected hosts to remove the guest service fee and provide hosts with more control over their rates. This fee structure is known as Simplified Pricing.
>
> From December 7th2020, Simplified Pricing (15% host fee) will be the only available fee structure to all software-connected hosts on Airbnb globally (excludes US, Canada, Mexico, Uruguay, The Bahamas, Argentina, and Taiwan).

Airbnb claims that benefits are there, especially on the host side:

> This new service fee structure will allow you to have a simpler pricing strategy as you'll be able to set what the guests will pay. We'll also highlight the fact that there is no guest service fee added to your rates, making your listings more attractive to many guests. Hosts that have decided to switch and keep their prices competitive across channels have seen an overall increase in their bookings (~17%*).
>
> *Average observed bookings increase for hosts using host-only fee in Europe between November 2019 and February 2020. Actual results may vary for each host.

We tested with the previous example the consequences of the move in the pricing strategy (see Figure 7-C).

What do we see? Let's ask the following questions:

– Will hosts adjust their rates?

Probably yes. Airbnb proposes to host a "Software Provider" to ensure that hosts' earnings will not be impacted. But at the same time, Airbnb calls on its hosts to remain competitive. And for that, they developed a tool–"smart pricing" to provide advice to hosts on positioning their prices competitively according to seasonality and alternatives. Hence, we can assume that prices will appear higher for the guests in listings (negative impact) but with a pleasant surprise at not having to pay service fees upon check-out (positive impact).

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6 See dedicated page on Airbnb website consulted in May 2022.

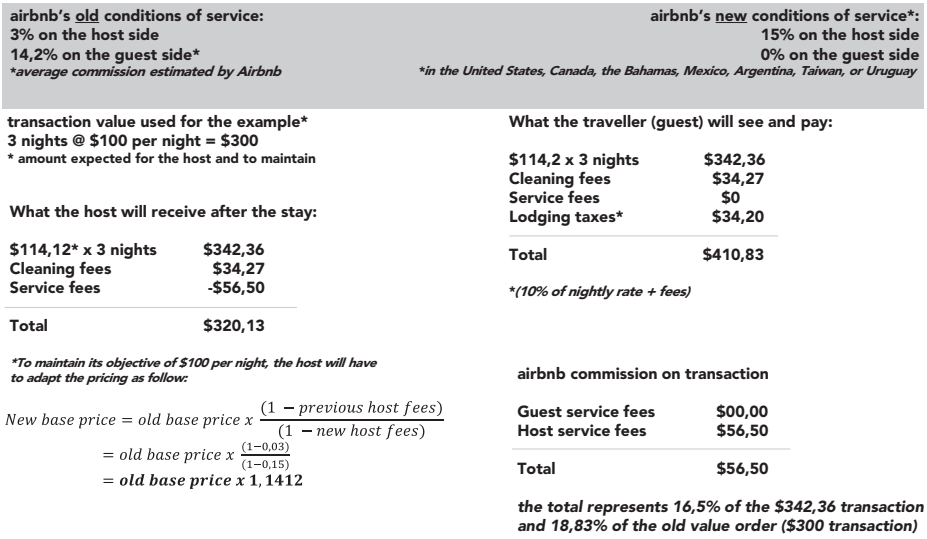

Figure 7-C: Example Based on the New Airbnb Simplified Pricing.

– If things do not change for Airbnb, why change?
In the example and based on our hypothesis that hosts will adjust their rates, we observe a jump from $52.50 to $56.50 for the commissions perceived by Airbnb, representing an increase of more than 7% of their commission per transaction.

Of course, it is slack, as potentially, the competitive pressures on hosts will limit the adjustments of rates. But Airbnb will generate higher revenues with that strategy.

– Can those adjustments change the business model?
Over the years, Airbnb has lost the community aspects that characterised it in its early days. Nowadays, many commentators feel that it is more of a nicely branded marketplace. Professional hosts have populated the website and have benefitted greatly from Airbnb as a distribution channel. The move in the pricing strategy can be seen as defending this community sense and differentiating pricing among participants on the host side. As Airbnb explicitly mentions, this move affects "software-connected hosts" – meaning professionals multihoming their listings and managing them with a channel manager. Accordingly, it is not a change in the business model but certainly a marketing re-orientation. Guests will not see these behind-the-scenes manoeuvres. Airbnb will increase its revenue with this apparent transparency for hosts, which in fact will induce opacity for guests and inflate the rates applicable on Airbnb.