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“Pay-What-You-Want” Pricing: Creating and Capturing Value Through Social Exchange

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Review

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Abstract:	In leading strategy theories like industry analysis and value capture theory, maximizing bargaining power with transaction partners is a critical driver of profitability. But in recent years, a new business model has emerged that contradicts this fundamental precept: With pay-what-you-want (PWYW) pricing, a seller allows a buyer to name any non-negative price, even zero, for the seller’s product or service, and yet, enough buyers make voluntary positive payments, and of sufficient magnitude, that the seller may earn a substantial profit. Motivated by this development, we develop a theory of how value creation and value capture—though generally treated as distinct processes in strategy theory—are in fact strongly connected through the socio-psychological framing of a transaction: If a transaction is framed as a social exchange between the buyer and seller, the seller may capture more value with PWYW than if the seller posts a price or haggles with the buyer over terms in a market-based exchange. Our theory not only offers testable predictions about the conditions determining when PWYW will be successful but also extends strategy theory to consider social exchange as a mechanism for creating and capturing value.

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**“Pay-What-You-Want” Pricing:
Creating and Capturing Value through Social Exchange**

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“Pay-What-You-Want” Pricing: Creating and Capturing Value through Social Exchange

ABSTRACT

In leading strategy theories like industry analysis and value capture theory, maximizing bargaining power with transaction partners is a critical driver of profitability. But in recent years, a new business model has emerged that contradicts this fundamental precept: With pay-what-you-want (PWYW) pricing, a seller allows a buyer to name any non-negative price, even zero, for the seller’s product or service, and yet, enough buyers make voluntary positive payments, and of sufficient magnitude, that the seller may earn a substantial profit. Motivated by this development, we develop a theory of how value creation and value capture—though generally treated as distinct processes in strategy theory—are in fact strongly connected through the socio-psychological framing of a transaction: If a transaction is framed as a social exchange between the buyer and seller, the seller may capture more value with PWYW than if the seller posts a price or haggles with the buyer over terms in a market-based exchange. Our theory not only offers testable predictions about the conditions determining when PWYW will be successful but also extends strategy theory to consider social exchange as a mechanism for creating and capturing value.

Keywords: pay-what-you-want pricing, social exchange theory, value-based strategy, new business model, platforms

INTRODUCTION

Imagine entering a store, seeing an item you want, and, not finding a price tag, asking the clerk how much the item costs. Then, imagine the clerk saying that you could take the item for free but that you would be welcome to make a payment out of the goodness of your heart. Although this may sound like a recipe for going bankrupt or the plot of a modern fairy tale, in recent years, a new business model called “pay-what-you-want” (PWYW) pricing has emerged that does exactly this: A business offers its product or service to customers for any price the customers wish to pay, even \$0, i.e., the business is prepared to give their product or service away for free, indefinitely, while hoping that a critical mass of buyers will voluntarily pay enough to generate a profit (Kim, Natter, & Spann, 2009). A prominent example is AfreecaTV, a Korean live video streaming (LVS) platform, in which a “streamer” broadcasts to an audience through the internet who watches on their computer or mobile device and may make voluntary payments to the streamer. AfreecaTV, a pioneer in developing both PWYW and LVS, as well as many of its streamers, has enjoyed years of strong profits and growth and is now being imitated by social media giants such as YouTube, Facebook, Twitch, TikTok, and Instagram (Ross, 2020). Other firms in consumer-facing industries such as digital goods (e.g., music, blogging) and food service (e.g., restaurants, cafes) have also found success with PWYW (Greiff & Egbert, 2018).

PWYW is hard to reconcile with existing strategy theory, which has focused on market-based (or industrial) exchange. In market-based exchange, the value created between a firm and a buyer is limited to a product’s use value, and the price paid by the buyer reflects a zero-sum division of value such that the firm would like to receive the highest possible price and the buyer would like to pay the lowest possible price. In this view, a firm should seek to maximize its market and bargaining power vis-à-vis buyers and suppliers (Porter, 1979), so that these

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3 transaction partners have fewer alternatives to the firm, which can accordingly “drive a hard
4 bargain” with them and thereby capture as much value as possible (Brandenburger & Stuart,
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6 1996, 2007; MacDonald & Ryall, 2004).
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10 In contrast, PWYW allows buyers to name any non-negative price, meaning the firm
11 effectively abandons (or never seeks to acquire) market and bargaining power, even though most
12 firms using PWYW are fully oriented toward shareholder wealth maximization. Despite the
13 abandonment of its bargaining power, the firm may capture a substantial amount of value
14 because customers voluntarily choose to pay positive prices. Why do customers pay positive
15 prices when they are not obligated to do so? Why do not freeloaders drive these firms out of
16 business by walking off with large quantities of the firms’ offerings for free? If we nonetheless
17 posit that the PWYW business model can sometimes be profitable, when would it be more
18 profitable than a conventional strategy oriented around market-based exchange?
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31 In this paper, we address these questions using a phenomenon-based approach wherein
32 we move from the anomaly that existing strategy theory does not explain (the success of the
33 PWYW business model) toward a theoretical explanation of that phenomenon (Fisher, Mayer, &
34 Morris, 2021). We ground our theory in social exchange theory, which is based on the notion
35 that individuals may behave in accordance with certain social norms even if doing so deviates
36 from utility maximization (Emerson, 1976). Whereas market-based exchange is essentially about
37 acquiring market and bargaining *power* over transaction partners, social exchange theory
38 incorporates such power but also elucidates the social norms (e.g., fairness in the distribution of
39 value) and socio-psychological factors (e.g., desire to show generosity) that constrain an agent
40 with power over a transaction partner from exercising this power (Cook, Cheshire, Rice, &
41 Nakagawa, 2013; Cook & Emerson, 1978; Molm, 1988). As a result, in an exchange setting
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where the importance of power is strongly mitigated, social norms and socio-psychological factors may enable a firm to co-create more value with customers than it would with market-based exchange, and constrain customers to make a positive payment to the firm in order to access this additional value. For example, a customer of a firm using PWYW has all the bargaining power by design and so could in principle pay \$0 for the firm’s product and capture its use value, but to capture additional value from feelings of fairness, belongingness, and public acclaim, the customer is constrained by social norms to pay a positive amount to the firm. Existing strategy theory, which is grounded in market-based exchange, does not account for these mechanisms. In essence, successful implementation of PWYW superficially facilitates free-riding by giving buyers the literal ability to get “something for nothing” but, paradoxically, impedes free-riding from a socio-psychological perspective, to the benefit of all stakeholders, notably the firm and its customers (Garcia-Castro & Aguilera, 2015), both of whom capture *more value* than they would in a conventional market-based exchange.

Our paper thus contributes by extending strategy theory to consider social exchange as a source of value on the consumption side of a market. Moreover, our theory incorporates the concepts of value creation and value capture from value capture theory (Brandenburger & Stuart, 2007; Gans & Ryall, 2017) and, more informally, of leading strategy teaching materials (Ghemawat & Rivkin, 2014) to explicate how establishing social exchange with buyers can be a mechanism for capturing value. Importantly, although existing strategy theory treats value creation (cooperative) and value capture (competitive) as distinct processes (Bowman & Ambrosini, 2000; Brandenburger & Stuart, 1996; Lepak, Smith, & Taylor, 2007)—with perhaps the only caveat that a large, powerful firm should leave some value for transaction partners to incentivize them (John & Ross, 2021; Wareham, Fox, & Giner, 2014) or to keep them in

business—our theory shows that value creation and value capture are actually strongly linked through the social system in which transacting parties are embedded and the socio-psychological framing of their transaction. Although PWYW provides a powerful illustration of the interconnection between value creation and value capture, this interconnection is present in strategies that incorporate elements of both PWYW and conventional pricing, as well as in strategies usually analyzed entirely with a market-based exchange frame and zero-sum bargaining. Therefore, our theory's implications go well beyond PWYW itself, as we discuss later.

PWYW IN ACTION

As noted, the distinguishing feature of PWYW is that the buyer may choose any non-negative price, even zero, and the seller will accept it (Gneezy, Gneezy, Riener, & Nelson, 2012; Kim et al., 2009). Unlike more widely known contexts for voluntary payment, such as tipping and charitable contributions, PWYW has been increasingly used all over the world for selling goods and services that are typically sold using conventional posted prices (e.g., music, food and beverages, entertainment services, etc.) (Greiff & Egbert, 2018), frequently in competition with sellers using conventional posted pricing (Chao, Fernandez, & Nahata, 2015). The PWYW model has had particular success in certain industries, most notably in live video streaming (Lu, Dai, Chen, & Grewal, 2020).

Following other theoretical work on business phenomena that may be unfamiliar to some scholars (e.g., Fisher et al., 2021; Sarasvathy, 2001; Seidel, Hannigan, & Phillips, 2020), we now discuss three diverse applications of PWYW in some detail. Importantly, some of these applications were more successful than others, and some of them incorporate market-based exchange, as well. We believe that our theory sheds light on this variation.

Live Video Streaming: AfreecaTV¹

As an ongoing business model, PWYW has been especially successful in live video streaming (LVS) (e.g., YouTube Live, Twitch, AfreecaTV, TikTok). Unlike video on demand (VOD), in which users watch pre-recorded videos (e.g., YouTube, Netflix), with LVS, users watch the live video of a “streamer.” The most popular category of LVS is computer gaming, in which the streamer either offers commentary on the game play of others (e.g., at a tournament) or streams their own play. But in recent years, other categories have become popular, such as chatting (including topics one might find on talk radio), comedy, travel, fishing, and “mukbang,” in which the streamer eats large quantities of food. LVS usually features chatting, whereby users can communicate with the streamer in real time and also make donations (see below).

The firm credited with launching LVS and its associated donation-based revenue model is AfreecaTV, the top LVS platform in South Korea (with ~ 50% market share). AfreecaTV users may buy an in-platform currency called “star balloons” and then “send” these balloons during broadcasts. 30-40 percent goes to AfreecaTV, and the rest goes to the streamer. Most donations are given spontaneously during broadcasts, but it is also possible for a user to subscribe to a streamer’s channel (i.e., make regular payments) or send balloons while watching a recording of a broadcast. Streamers usually offer thanks demonstrably when balloons are sent, and many users report that sending balloons has become a habit. About 72% of AfreecaTV’s roughly \$150 million in annual revenue is from its share of star balloon revenue. Although most streamers are hobbyists, a significant number do it full time, and some earn over \$1 million a year from balloons alone (as well as multiples of that from ad revenue on other platforms, mainly VOD on YouTube).

¹ The material in this subsection on AfreecaTV is drawn from the business case *AfreecaTV: The Godfather of Streaming* (Ross, 2020) and its associated teaching note.

Interviews with AfreecaTV users and executives suggest that the motivations for giving fall into two broad categories. First is sympathy (in terms of common feeling, not pity). Sympathy includes not only feeling a sense of kinship from spending many hours watching and interacting with the streamer but also rewarding the streamer for trying hard to entertain, for undergoing an important life event (e.g., birthday, winning or losing a competition), or for fulfilling a “mission,” i.e., when users give the streamer a task (e.g., playing a game a certain way or asking a certain interview question). Users also report feeling guilty if they do not send balloons to a streamer sincerely trying to entertain and may invest in an up-and-coming streamer so they can develop better content. Second is display, i.e., self-presentation for other users, the streamer, and oneself. Users who make large donations to a particular streamer, which are visible in chat, can earn status levels (as one often sees in charitable giving), affording users the opportunity to show off their wealth or generosity.

These socio-psychological factors are embedded in what both AfreecaTV executives and users report to be a strong community-based culture that exists on each successful streamer’s channel and close social relationships built among the streamer and users. Indeed, the give-and-take wherein the streamer entertains, the user sends balloons, and the streamer thanks the user in the broadcast has the ritualistic flavor characteristic of social exchange (e.g., Christmas or wedding gifts, taking turns paying for dates, etc.).

Other internet platforms have imitated AfreecaTV. Twitch, a subsidiary of Amazon, is the most famous LVS firm worldwide. It recently added “Twitch bits” for donations, as have YouTube Live (SuperChat) and TikTok (Coins) as part of their new LVS functionality. In general, gift-giving outside South Korea is not as strong as on AfreecaTV, but some Chinese LVS platforms have developed significant giving businesses, and giving is common on LVS

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platforms around the world. That said, all LVS platforms derive revenue from more conventional sources, such as advertising or the sale of privileges (e.g., to avoid this advertising or to use certain chat icons). The relative importance of these other sources of revenue vis-à-vis donations ranges from small on AfreecaTV in Korea to quite large on other LVS platforms elsewhere. We also note that the marginal cost of serving non-paying LVS users is close to zero (although, at some point, they may impose network capacity costs), and they may contribute to the community by chatting and by providing an audience for paying users. We return to these points below.

Food Service: Panera Bread

A number of restaurants, cafés, and other food service outlets have experimented with PWYW. The most famous were Panera Cares Community Cafés operated by Panera Bread, a premium quick-service food chain that offers coffee and baked goods. Its first community café opened in 2010 in Clayton, an affluent suburb of St. Louis, MO. Rather than charging fixed prices, customers were asked to “take what you need, leave your fair share” by depositing money into a lockbox, making the concept more “pay what you can” than “pay what you want” (Strom & Gay, 2010). Nonetheless, the cafes did post suggested prices. Patrons were reported to be confused, but some paid more than they would have at standard Panera Bread locations (Strom & Gay, 2010). The concept would later be rolled out to multiple locations, including Dearborn, MI, Portland, OR, and Boston, MA (Abelson, 2012).

The experiment lasted nearly a decade, but the concept was only able to generate revenue of 85¢ on the dollar of costs (Gonzalez, 2019), so the last of the community cafés was closed in 2019 (Patton, 2019). Press reports spoke of two main problems. First, there were too many freeloaders, some of whom arrived with large bags to take as much food as possible. In response, Panera started limiting the size of bags and asking patrons who could not pay anything to work

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3 for an hour for their meal (Gonzalez, 2019). Second, the cafés attracted indigent people, with
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5 whom higher-income, potentially more generous customers did not wish to associate (Abelson,
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7 2012).
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10 All told, the results of PWYW in food service have been mixed. In a series of field
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12 experiments, Kim et al. (2009) found that prices using PWYW averaged 19.4% *lower* for a
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14 restaurant's buffet but averaged 10.6% *higher* for hot beverages at a delicatessen whose owner
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16 had a habit of chatting with customers. These examples raise important issues to which we return
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18 later: the richness of the social interaction between buyer and seller, whether the buyer interacts
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20 with an employee or someone who benefits directly from a voluntary payment (i.e., a residual
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22 claimant), the extent of the opportunity to display one's generosity and wealth to others, the
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24 positive or negative impact of non-paying customers on paying customers, and the marginal cost
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26 of the good (which represents the amount lost to non-paying customers).
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31 **The Arts: Radiohead**

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33 Artists—"content creators," in modern jargon—have relied on patronage for all of recorded
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35 history. Many consumers directly sponsor their favorite content creators using applications like
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37 Venmo, CashApp, or PayPal. Patreon, started in 2013, is a platform through which content
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39 creators of all kinds (musicians, social media influencers, writers, painters) may solicit support
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41 from patrons, who pay either a subscription or on a per-work basis. A creator's content may be
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43 available to all elsewhere (e.g., on a blog or a podcast) or only to those who donate on Patreon;
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45 in the latter case, Patreon would cease to be PWYW in its pure form. In general, these patterns of
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47 exchange do not necessarily have a market-based analogue and, thus, might not be considered
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49 PWYW, although the socio-psychological factors we discuss in relation to PWYW, we would
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51 argue, would still be important.
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Museums, for their part, often follow different strategies for different customer groups. For example, the Metropolitan Museum of Art in New York City uses PWYW for local residents and nearby students, but everyone else pays fixed prices. A few blocks away, the Guggenheim Museum uses PWYW for those who arrive within a couple of hours of closing and fixed prices for everyone else.

In music, a number of artists have used PWYW for what would normally be market-based transactions with set prices. The most prominent example is the band *Radiohead*'s digital release of its album *In Rainbows* in 2007, which, amid much fanfare, allowed fans to download the album for any price they wished to pay (Cohen, 2007). Reportedly, 62 percent of downloaders paid nothing, but 12 percent paid at least the “full price” of \$8–\$12, and the remainder paid something positive (Jang & Chu, 2012). Some customers even claimed that they paid \$20–\$30 or more, more than they would have paid for a conventional album (Raju & Zhang, 2010). Shortly afterwards, the band released a physical version of the album using standard fixed prices, which reached number one on several *Billboard* charts and sold millions worldwide (Garland, 2009).

Thus, the digital release of *In Rainbows* is generally considered successful in the behavioral economics literature and by practitioners, who point to the free publicity that *Radiohead* generated and how the digital release cut out the middlemen who capture much of the value in music sales (Kumar, 2017). Some of what made the digital download successful, however, was arguably the subsequent physical release. In that regard, the marginal cost of free downloading is zero, and the digital release served marginal fans who would otherwise have been priced out of the market by giving them an option to purchase the music for less (Bakos,

1998; Raju & Zhang, 2010). This helped publicize the band and its music, creating a larger audience for the physical album.

THEORETICAL FOUNDATIONS

In this section, we first define market-based exchange with respect to value capture theory. We then situate PWYW in value capture theory and show that market-based exchange cannot account for the success of PWYW. Next, we extend value capture theory by conceptually incorporating the critical elements of social exchange theory that serve as a foundation for our theory of the PWYW business model. In a subsequent section, we explore these social exchange mechanisms in detail and relate them to the conditions that determine the success of PWYW.

Value Capture Theory & Market-Based Exchange

We define market-based (or industrial) exchange in line with existing strategy theory, specifically value capture theory (Brandenburger & Stuart, 2007; Gans & Ryall, 2017). In the standard formulation, participants in market-based exchange—be they firms or individuals—only derive benefit from “use value,” that is, the intrinsic value of a good or service itself. Value is defined in terms of a numeraire good or currency (e.g., the US\$), is generally freely transferable among parties²—for example, by paying the price for a good—and may include psychological benefits (e.g., pride of ownership of a collectible). This canonical situation from value capture theory is depicted on the left in Figure 1 in which a supplier, focal firm, and customer come together to co-create value (Brandenburger & Stuart, 1996). This example is simple and stylized, but far more complex situations can be modeled in this framework.

² Formally, this value is transferable utility because its total quantity is not affected by how it is distributed among participants to the exchange.

Insert Figure 1 about here

In Figure 1, *willingness-to-pay*, on the top of the “value stick,” represents the absolute maximum the customer would ever pay for the firm’s good or service, under any circumstances. Under market-based exchange, *willingness-to-pay* is equal to the customer’s use value. *Opportunity cost*, on the bottom of the value stick, is, correspondingly, the lowest price the supplier would ever accept from the firm for whatever inputs the supplier supplies to the firm. Thus, the total value co-created among the three parties is *willingness-to-pay* minus *opportunity cost*. In the standard formulation, this value is entirely a function of the supplier, firm, and customer coming together to transact without regard to the division of that value (Ross, 2018). Then, *price* (between firm and customer) and *cost* (the price between supplier and firm) determine the split of value among the three parties as a function of their relative market and bargaining powers; in terms of value, the customer receives *willingness-to-pay* minus *price*, the supplier receives *cost* minus *opportunity cost*, and the firm receives *price* minus *cost* (as depicted on the left of Figure 1). A firm with greater bargaining power can “drive a hard bargain” with its transaction partners and thereby capture more value above and beyond the minimum share guaranteed by its market power (Brandenburger & Stuart, 1996, 2007; MacDonald & Ryall, 2004), that is, the firm can drive *price* up closer to *willingness-to-pay* and *cost* down closer to *opportunity cost*. It follows that the more market and bargaining power the firm has, the more value it captures.

Now, suppose that the firm adopts PWYW and hence lets the customer pick any non-negative *price* (i.e., the firm abandons or never seeks to acquire bargaining power). Under a market-based exchange frame, it would in general be rational for the customer to pick the lowest

allowable *price*, i.e., \$0. This situation is depicted in the center of Figure 1. The customer captures her entire *willingness-to-pay*, the supplier captures *cost* minus *opportunity cost* as before, and the firm *loses* value equal to *cost*, effectively subsidizing the other parties to the transactions. Yet, with successful implementations of PWYW, the customer does not pay \$0 but a large enough *price* for the firm to capture significant value. Why?

One possibility is that if the customer is quite large relative to the firm, intertemporal concerns could prompt the customer to share more than \$0 with the firm, even using a market-based exchange frame. An example would be contractually sharing value to incentivize the firm to invest in value co-creation (John & Ross, 2021; Wareham et al., 2014) or to allow it to survive in a power-dependence relationship (Pfeffer & Salancik, 1978). But this cannot serve as a general explanation for the success of PWYW, which is usually implemented in contexts in which customers are small relative to the firm. In these situations, under a market-based exchange frame, a tragedy of the commons (Ostrom, 2009) would arise in which it might be collectively optimal to support the firm but individually rational for each consumer to free-ride by paying \$0. And yet, consumers often make voluntary payments of sufficient magnitude that the firm does not merely survive but makes a healthy profit, often more than it did with conventional pricing. In short, market-based exchange does not offer much to explain the socio-psychological factors underlying PWYW, which is a fundamentally non-industrial context. Hence, we expand the notion of exchange in value capture theory to incorporate social exchange theory and, thereby, offer an explanation for how firms create and capture value with PWYW.

Social Exchange Theory & Value Creation

Both social exchange and market-based exchange are forms of exchange whereby individuals or organizations interact and trade resources, but they differ in several respects. Although, like

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market-based exchange, social exchange involves “voluntary actions of individuals [or organizations] that are motivated by the returns they are expected to bring and typically in fact bring from others” (Blau, 1964: 91), social exchange does not always involve contracts or explicit bargaining, nor does it require immediate reciprocation, for example, by tendering payment (Molm, 2003). Rather, social exchange often takes place under conditions of interdependence among actors (Emerson, 1976). Whereas in market-based exchange, actors’ relative power determines the split of resources, in social exchange, the importance of power is strongly mitigated because actors do not negotiate but engage in gift giving contingent on each other’s reciprocal behaviors (Cook et al., 2013; Molm, Peterson, & Takahashi, 1999). The resources “obtained” in social exchange include not only tangible goods or services, as in market-based exchange, but also socially valued utility such as solidarity, fairness, status, or approval that inhere in the transaction itself, rather than just the good or service exchanged (Lawler, 2001; Molm, 2003). These resources are especially salient on the consumption side of a market.

Unlike market-based exchange, in which individuals are fully self-interested in a very narrow sense, social exchange theory recognizes that individuals are as boundedly self-interested as they are boundedly rational (Bosse, Phillips, & Harrison, 2009; Connelly, Shi, & Zyung, 2017; Lioukas & Reuer, 2015). People’s desire to maximize utility or capture value is bounded by their care for others and conformity to certain social norms (Jolls, Sunstein, & Thaler, 1998). Accordingly, social exchange theory holds that all exchange, whether of a commercial nature or not, is fundamentally social, such that economic behavior is affected by compliance with specific social norms (Bosse & Phillips, 2016; Fehr & Gächter, 2000; Fisher, 2019; Friedman, Abeelee, & De Vos, 1993; Markle, 2011), whose impact is mediated by how transacting parties

psychologically frame the exchange—e.g., as competitive, fairness-based, community-oriented, etc. (Cropanzano & Mitchell, 2005; Fiske, 1992; Lawler, 2001).

Thus, social exchange theory helps us understand how PWYW can be successful even when the seller (or firm) does not seek or even forgoes (bargaining) power in exchange relationships. As we argue in more detail below, a pivotal feature of social exchange theory vis-à-vis other theories is that it manifests three important mechanisms that are especially relevant for PWYW and figure strongly in its success: reciprocity, community, and display. With *reciprocity*, people reward those they deem fair (e.g., by sharing value) and punish those they deem unfair (e.g., by withholding value) even if doing so reduces their own value capture (Bosse et al., 2009; Fehr & Gächter, 2000; Gouldner, 1960; Jolls et al., 1998). This has been repeatedly observed in the labor market: If firms pay employees a wage above their opportunity cost, the employees often reciprocate by working harder because they perceive that they are treated fairly (Dohmen, Falk, Huffman, & Sunde, 2009; Fehr, Gächter, & Kirchsteiger, 1997). With PWYW, a customer directly reciprocates by paying the firm a positive price for the products and services offered.

Social exchange theory also foregrounds the sense of belongingness that comes with *community* (Emerson, 1976; Molm, Collett, & Schaefer, 2007), that is, a shared set of structural mechanisms promoting interaction and behavioral mechanisms that create bonds, ultimately leading to a collective with shared social resources and a sense of group identity (Fisher, 2019). Given the normative actions of community members and the resulting emotional attachment to the community, community membership often leads to prosocial behaviors, such as making donations of time and money, to maintain acceptance (Leary, Tambor, Terdal, & Downs, 1995). These behaviors are a form of generalized reciprocity manifested in PWYW, wherein the

individual does not reward their benefactor directly but rewards the benefactor indirectly by rewarding someone else from the same community (Baker & Bulkley, 2014; Emerson, 1976).

Finally, social exchange theory highlights social norms that determine what personal characteristics are valued by the community and how individuals can *display* that they possess these characteristics to others and themselves (Blau, 1964; Flynn, 2003). Wealth and generosity are frequently valued personal characteristics, and these can be demonstrated with conspicuous consumption, in the form of paying a large voluntary price to a PWYW merchant (Bracha & Vesterlund, 2017). Similarly, one may give to demonstrate conformity to norms established by high-status actors who already gave (Kumru & Vesterlund, 2010).

Suppose, then, that a firm using PWYW and a customer engage in social rather than market-based exchange. The customer is accordingly motivated by considerations of reciprocity, community, and display, three normative mechanisms we argue later are paramount in the PWYW business model. This situation is illustrated on the right in Figure 1. Depending on the customer’s predilections, the social environment, and the posture of the firm, voluntarily paying a positive price can increase the total value created in the transaction by giving the customer socio-psychological value from conforming to social norms, such as being “fair” as an end in itself, helping someone “in need” or who the customer believes deserves help, contributing to the community, and displaying wealth or social status. These social-psychological sources of value are depicted in the figure as an increase in *willingness-to-pay* because they add to the use value that the customer would derive from the product under market-based exchange. For example, if a seller posts fixed prices, as is common in retail, a customer can only purchase the product or not for this posted price, limiting the customer’s ability to demonstrate generosity to herself and others. But if the seller uses PWYW, the customer now has the opportunity to capture socio-

psychological value over and above the product's use value by *voluntarily* making a significant positive payment and thereby, inter alia, demonstrating her generosity. In a reciprocal fashion, voluntarily making a positive payment may also allow the customer to avoid generating *negative* value (destroying value) that may arise from being "unfair," neglecting to contribute to the community, demonstrating stinginess, or losing face.

The figure depicts a case where making a positive payment under PWYW is value-maximizing for the customer, allowing both the customer and firm to capture positive value and generating more total value than they would when using a conventional market-based pricing model.³ Note also that the extra value generated by social exchange would generally vary by customer in proportion to the strength of relevant socio-psychological factors (i.e., reciprocity, community, and display), and the strength of these factors is likely to be positively correlated with use value (Samahita, 2019). The reason is that one would feel more obligated to reciprocate to the firm or the community for receiving a good or service that one especially values. Thus, PWYW, by inducing customers to share their value with the firm, can serve as a mechanism for enacting price discrimination.

VALUE CREATION DRIVERS OF PWYW

We now theorize about the factors that are likely to make a PWYW business model more successful based on the social exchange mechanisms described above, as well as on other powerful economic mechanisms that may, in some cases, be too strong for social exchange to overcome. The definition of success obviously depends on the goals of important stakeholders

³ Formally, the additional value generated by the social exchange mechanisms of reciprocity, community, and display is non-transferrable utility. Non-transferable utility cannot be freely shared among parties to a transaction without affecting the total amount of utility. In this example, if the customer does not make a positive payment to the firm, the value generated by these social exchange mechanisms would vanish. Other situations that give rise to non-transferable utility include bargaining among players who have concave utility functions (Chakravarty, Manipushpak, & Sarkar, 2015: 170-1) or where bargaining affects incentives (Grennan, 2014).

(e.g., growth, survival, profitability). To fix ideas, in keeping with the focus of the field of strategic management, we define the successful implementation of PWYW as being “relatively profitable,” that is, where a firm can use it to create and capture more value than using a conventional market-based pricing model in which the split of value is determined through posted prices (typical of retail) or haggled over (typical of business negotiations). Figure 2 depicts our overarching theoretical framework, including the main socio-psychological drivers, important contingencies, and economic factors than determine whether an implementation of PWYW will be successful. We also note that not all of these socio-psychological drivers must be simultaneously present for PWYW to work. Rather, the stronger each of them is, the more likely PWYW is to be successful.

Insert Figure 2 about here

Reciprocity

As noted, social exchange differs from market-based exchange in that it does not require contracts, explicit bargaining, or immediate commitment to pay. As a result, it is uncertain whether exchange partners will receive an appropriate share of value from their exchange and what the outcome of the exchange will be. In order to reduce uncertainty and make exchange relationships into mutual commitments, exchange participants conform to certain norms of exchange, which serve as guidelines of exchange processes (Cropanzano & Mitchell, 2005; Emerson, 1976).

A prominent exchange norm is reciprocity (Blau, 1964; Gouldner, 1960), whereby exchange partners enter an implicit arrangement in which they make interdependent transactions and tend to act contingent on the other’s behavior (Cropanzano & Mitchell, 2005). For instance,

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3 people tend to be favorable and cooperative towards others who are friendly to them (positive
4 reciprocity) and unfavorable and belligerent towards others who are hostile to them (negative
5 reciprocity). This norm of reciprocity can be understood as a social mandate with which people
6 ought to comply and perhaps face punishment if they do not do so (Cropanzano & Mitchell,
7 2005; Gouldner, 1960). For instance, customers at a café may feel socially pressured to tip when
8 they encounter a tip jar filled with cash. Moreover, people's decision to take positive or negative
9 reciprocal actions is often based on the extent to which they perceive the other's behavior as fair;
10 people evaluate the fairness of others' behaviors and reciprocate by rewarding those they
11 perceive as fair and punishing those they perceive as unfair (Bosse et al., 2009; Fehr & Gächter,
12 2000). This consideration of fairness in social exchange deviates from the assumption of self-
13 interest in market-based exchange wherein actors are primarily concerned with their private
14 economic returns.

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17 Positive reciprocity is also a mechanism through which social relationships between
18 economic actors are initiated and maintained (Gouldner, 1960). As stated above, in social
19 exchange, a gesture of giving typically solicits a return action. Although not all such gestures are
20 motivated by self-interest, they may be intentionally used to draw someone into a relationship
21 (Pelapat & Brown, 2012). If the counterparty accepts the gift, a social relationship between
22 exchange partners is established. Sometimes, people even refuse gifts or favors because they do
23 not want to owe the other person anything. In a word, gift exchange behaviors create and develop
24 social interactions with other social groups (Mauss, 1967).

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26
27 Some products and services lend themselves to inducing social exchange and adopting
28 reciprocity as a norm. An important aspect of this is trial consumption. Sellers use product
29 giveaways to encourage buyers to try and hopefully become regular purchasers of a product

(Thomas, 2006). In part, a trial gives buyers the opportunity to discover whether they like the product. At the same time, trials, especially free trials, often generate considerable positive affect among buyers (Shampanier, Mazar, & Ariely, 2007), creating the conditions for reciprocity. PWYW, as the ultimate “free trial,” is especially apt to generate this effect. For example, with LVS, a user may be browsing to kill time and come across a streamer’s channel. After watching for a little while, the user may realize that she has been enjoying the streamer’s content. This initial period of consuming the streamer’s content served as a free trial. What is more, the user may (subconsciously) perceive the free content as a gesture of giving from the streamer. This interpretation is reinforced when the streamer encourages the user to influence the content by asking questions or proposing missions (as described above), thereby implicitly inviting the user into a social exchange relationship. If the user ultimately accepts the gift of free content, she may feel obligated to pay the streamer to conform to the norm of reciprocity and experience a “warm glow” (value from positive affect) (Liu & Wezel, 2015) from making this payment. By contrast, it may have been somewhat harder to induce new customers to try the food and beverages at a Panera Cares Café because customers would presumably make their payment decisions before tasting their purchase, and some customers may have been reluctant to incur the resulting social obligation.

Similarly, once such a social exchange relationship is initiated, intertemporal dependence in the actions of buyers and firms is important for promoting reciprocity because reciprocity is bidirectional. In LVS, the streamer’s future behavior (e.g., acknowledging and thanking the user verbally for a gift) is contingent upon the user’s current behavior (e.g., making a donation or nice comment). In general, streamers are expected to respond to donations, with the affect and demonstrability of the response being proportional to the size of the donation. In this way, the

streamer's reaction becomes part of the platform's service. Likewise, interaction with the owner may also have been part of the value customers derived from the delicatessen in the study of Kim et al. (2009). The intertemporal nature of reciprocity leads to a self-reinforcing cycle of exchanges between streamer and user, or between seller and buyer in a more general setting (Coleman, 1988; Cropanzano & Mitchell, 2005).

The outcome of such self-reinforcing exchange may be that the initial transaction becomes frequent and repeated, generating more psychological value. Conversely, buyers that do not pay at all are violating the norms of social exchange and will feel distressed and may reproach themselves (Ariely, Bracha, & Meier, 2009; Regner & Barria, 2009). This give-and-take pattern of interactions in LVS is one of the reasons LVS lends itself to a social-exchange frame in which users tend to consider their own enjoyment of the product or service rather than its likely market price in assessing value. This means users of LVS or, more generally, buyers with high willingness-to-pay for a product or service (due to wealth or preferences) will pay more voluntarily, allowing the seller to use PWYW to price discriminate.

Another factor facilitating reciprocity is personal interaction. As has been observed with negotiations (Adler, Brahm, & Graham, 1992), the richer the interaction in terms of the senses (e.g., whether the seller and buyer can see each other) and how extensive that interaction is (a few sentences versus a long conversation), the better to elicit reciprocity between parties. Thus, watching a streamer or interacting in person is better than via email to facilitate reciprocity. Indeed, evidence shows that buyers make larger voluntary payments in a PWYW setting when they engage in face-to-face interactions with sellers because the buyers want to avoid violating social norms and do not want to appear cheap (Kim et al., 2009).

It is also important whether the buyer interacts directly with a residual claimant of a firm using PWYW (Dur, Non, & Roelfsema, 2010), because the residual claimant directly benefits from any positive payment the buyer chooses to make. For instance, in the case of Panera Cares Cafés, customers interacted with employees, not Panera’s shareholders. Thus, making a large payment to a Panera Cares Café was not directly reciprocating the employee for the employee’s personal engagement. If reciprocity motivates a customer to make a voluntary payment, giving the employee a tip would be more efficacious. Conversely, streamers, who interact directly with viewers, take a significant share of voluntary payments on most LVS platforms, that is, they are residual claimants and directly benefit from a user’s reciprocity. Therefore, for a user motivated by reciprocity, making a voluntary payment makes sense.

Proposition 1. PWYW will be more relatively profitable in exchange settings that facilitate reciprocity, namely where the nature of the product or service makes it easy to induce a buyer to try the product or service, seller and buyer have a richer personal interaction, and a residual claimant of the seller (i.e., someone who directly benefits from the buyer paying a positive price) interacts with the buyer.

Community

Social exchanges between economic actors may be embedded in a larger, structured set of social relationships involving multiple economic actors. In particular, a firm typically engages in multiple social exchanges with different buyers, who are connected to one another through the firm. In this multilateral, rather than dyadic, relationship, generalized reciprocity is contingent on another actor’s exchange behavior, whose exchange behavior is contingent on yet another actor’s exchange behavior (Baker & Bulkley, 2014; Bearman, 1997). Similar to bilateral reciprocity, generalized reciprocity emerges because a participant feels obligated to reciprocate, not by directly rewarding her benefactor, but by rewarding another actor associated with the participant and her benefactor (Baker & Bulkley, 2014). When one actor receives a favor, she does not necessarily respond to the specific benefit that she has received, but she “pays it forward” to the

group or to honor the social relation itself (Emerson, 1976). In a word, actors behave prosocially for the community.

An important result of this dynamic is that an individual establishes strong social bonds with other individuals and views herself as a member of the social group or community to which she belongs (Ashforth & Mael, 1989; McMillan, 1996; Molm et al., 2007). This sense of community may be described as “a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members’ needs will be met through their commitment to be together” (McMillan & Chavis, 1986: 9). One of the psychological benefits of belonging to a group or community is that it brings emotional safety to its members (McMillan, 1996). Because a community empathizes, understands, and cares for its individual members, they feel comfortable sharing psychological intimacy and using the community for support during stressful events and situations (Sandefur & Laumann, 1998). Hence, this sense of belongingness and identification evokes a feeling that one fits in a group and is accepted by the group. As a result, people constantly monitor the degree to which they are being included by others, act to reduce the risk of being excluded (Leary et al., 1995), and react to bring back the level of inclusion if it falls below a desirable level (Lakin, Chartrand, & Arkin, 2008; Maner, DeWall, Baumeister, & Schaller, 2007). In that regard, an individual’s desire for a sense of belongingness stems from a fundamental need to belong (Baumeister & Leary, 1995).

Thus, generalized reciprocity and its consequent sense of belongingness and community may generate significant value for buyers in some settings. In particular, similar consumption patterns among buyers can create a sense of community (Friedman et al., 1993). Consumption communities consist of people who consume the same types of objects and, thus, share common interests and concerns. Individuals are motivated to participate in consumption communities to

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3 establish interpersonal connectivity with other people and thereby to socialize, build friendships,
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5 receive social support, and dispel their loneliness (Dholakia, Bagozzi, & Pearo, 2004; Lee &
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7 Shrum, 2012). Their participation also establishes interpersonal connectivity with other people,
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9 allowing them to identify themselves as members of the group and develop a sense of
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11 belongingness with the community (Nambisan & Baron, 2009; Wang, Chan, & Yang, 2013). For
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13 these reasons, buyers in consumption communities are emotionally attached and loyal to the firm
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15 and its product (Muniz & O'guinn, 2001). In consequence, they tend to limit their search for
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17 products or services, and willingly or inadvertently pay more for these products or services
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19 (Fisher, 2019), as has been documented with respect to German municipal utilities⁴ (Liu &
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21 Wezel, 2015), for instance. Although these buyer behaviors do not require a firm to use PWYW,
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23 they facilitate its implementation, for they redirect buyer behavior away from the price search
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25 and haggling associated with market-based exchange.
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31 Clearly, many factors may make it easier or harder for a firm using PWYW to develop a
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33 community. Interaction not only between a firm and a buyer but also among buyers facilitates a
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35 sense of community. This sense of belongingness to a community is considered a critical success
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37 factor in LVS, with AfreecaTV users highlighting its importance for their participation on the
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39 platform and the sub-communities built around specific streamers. AfreecaTV executives even
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41 assert that many users would rather discuss hard times with their favorite streamers and other
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43 users than with their own families. One of the most successful streamers commented that “the
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45 [streamers] and users develop a sympathetic bond. They grow close, like friends. Like
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47 [neighborhood] boys and girls, who see each other every day and suffer the same afflictions”
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49 (Ross, 2020: 5). Twitch, for its part, foregrounds the importance of building a community in its
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55 ⁴ Municipal utilities are a symbol of the community with which German citizens strongly identify. Customers are
56 willing to pay more for local electricity, even with cheaper options from nationwide utilities (Liu & Wezel, 2015).
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training videos for onboarding streamers. A strong sense of community established among *Radiohead* fans may also have helped make the PWYW digital release of *In Rainbows* successful; indeed, many *Radiohead* fans conferred with each other about how much they paid for the album (Raju & Zhang, 2010).

Because people tend to value firms or products that are indigenously conceived and imbued with distinctive local content (Steenkamp & De Jong, 2010), firms associated with local cultural identification, as with German municipal utilities, or products associated with a pre-existing community, as with the programmers of open-source software (Benkler, 2002; Lee & Cole, 2003), may be especially successful with PWYW. Moreover, individuals identify themselves with their group more strongly as the distinctiveness of the group, the prestige of the group, and the salience of outgroups increase (Ashforth & Mael, 1989). For this reason, firms whose characteristics make them socially salient, such as fashion (e.g., the tee-shirt design community associated with Threadless), creativity (e.g., Lugnet, the user community associated with construction toy maker Lego), and social responsibility (e.g., shoppers and influencers associated with food retailer Trader Joe's) may be particularly successful with PWYW.

Proposition 2. PWYW will be more relatively profitable in exchange settings that facilitate communities among buyers, namely where there is significant interaction among a firm's buyers and the product has a source of social identification.

Display

As noted above, in a social community, individuals are concerned about how they are viewed by others and are distressed at being excluded from the community. Therefore, people often engage in behaviors that can strengthen their image in the community (Ashforth & Mael, 1989; Flynn, 2003). In the critically acclaimed movie *The People's Republic of Desire*, a faux documentary set in China on LVS, wealthy benefactors who promote streamers out of vanity play a key role. Public display of one's wealth, often referred to as "conspicuous consumption" (Griskevicius et

al., 2007; Veblen, 1899), may thus be an important source of socio-psychological value by allowing buyers to reveal information about themselves (Johnson, Tariq, & Baker, 2018).

In general, a buyer conspicuously consumes products to obtain higher status in the community (Eastman, Goldsmith, & Flynn, 1999). Particularly in a consumption community, making costly purchases demonstrates a buyer’s commitment to the group, financial status, and social power (Han, Nunes, & Drèze, 2010). Likewise, consumers who feel socially excluded from the community often engage in conspicuous spending to burnish their image or reputation (Lee & Shrum, 2012). The reason is that, in a social exchange context, individuals considered critical to the group’s success because they provide resources of unique value to the group are more likely to be accorded social status (Flynn, 2003). Finally, the self is also an audience for one’s actions, and this internalized self-image should be more important in the context of social exchange, where one is “supposed” to care about more than just a product’s use value and price, that is, where one internalizes these norms.

It is not surprising, then, that in a PWYW context, gaining social status and maintaining a positive self-image are said to spur buyers to make positive payments. Indeed, buyers under PWYW are concerned about the way that they are viewed by others if they do not reward the seller for what has been offered (Gneezy et al., 2012). AfreecaTV executives also acknowledge the role in making donations of such “display,” although it is not considered the most important motivation for giving at AfreecaTV. In that regard, non-donating users are often regarded as stingy, leading some users to donate to save face (Ross, 2020). The importance of display (to oneself and others) is corroborated by academic research on LVS linking giving to audience size (Lee, Choi, & Kim, 2019; Lu et al., 2020), and the importance of signaling generosity and wealth in charitable giving and tipping (Ariely et al., 2009; Azar, 2007; Bracha & Vesterlund, 2017).

LVS provides a potentially large audience for the giving (or lack of giving) behavior by users, making display an important source of value. The user's utility from donating increases as the size of the audience grows because the signals of social status and prosocial behavior reach more people (Bénabou & Tirole, 2006). Quick-service food outlets, like Panera Cares Cafés, on the other hand, provide a somewhat weaker opportunity for display to others given that the audience is limited to the workers and other nearby customers. Private transacting environments provide the lowest opportunity for display to others, for example, purchasing gasoline (petrol) at a self-service station. Up to a certain point, the larger the audience, the more important is display, but at a certain point, an audience may become so large that only the largest donations get noticed, effectively crowding out some giving, as has been observed in LVS (Lu et al., 2020).

Publicizing the most generous givers increases the value of display, as LVS platforms do by favoring them with special statuses and chat icons, and Opera houses do by listing patrons in the playbill. That being said, large extrinsic rewards may eliminate the virtue-signaling value of voluntary donations (Bénabou & Tirole, 2006); indeed, some people believe that the only true charity is anonymous. If the visibility and status derived from making voluntary payments are excessive, some users who would have made such payments may not do so.

Proposition 3. PWYW will be more relatively profitable in exchange settings that facilitate displaying one's status and self-image, namely where payments are visible, the audience for payment is large (but not so large as to make small donations hard to notice), and where those who pay more can be rewarded (but not excessively) with status and visibility.

CONTINGENCIES AFFECTING SOCIAL EXCHANGE WITH PWYW

We now turn to important contingencies that affect whether social exchange can create value for a firm using PWYW and its customers.

Individual versus Commercial Buyers

In the examples of PWYW described above, the consumers are always individuals, who have discretion to make purchasing decisions based on their personal preferences and needs. This makes sense because, in general, consumers do pursue prosocial spending (e.g., donations) when they are concerned about their social relationships (Lee & Shrum, 2012; Mead, Baumeister, Stillman, Rawn, & Vohs, 2011). By contrast, the social exchange mechanisms underlying PWYW run into serious practical obstacles in a business-to-business setting. Engaging in reciprocity in a business-to-business setting could well be seen as improper, even as a form of bribery, if a manager chooses to make a large positive payment to a firm using PWYW. Although managers in a given industry may feel some sense of community with managers at competing firms, this feeling is mitigated by a fiduciary duty to outcompete them. Finally, a manager making a large positive payment to a firm using PWYW is spending the manager’s employer’s money and therefore is not displaying wealth or generosity. If, despite all this, a purchasing manager were still interested in making a positive payment to a PWYW merchant, common requirements of business-to-business transactions would stand in the way. These include the need for competitive bidding, sign-off from multiple departments and hierarchical levels, and the use of detailed, formal contracts.

This is not to deny that social exchange could ever play a role among businesses; indeed, it may play a role in alliance formation (Das & Teng, 2002; Lioukas & Reuer, 2015; Zaheer, McEvily, & Perrone, 1998). But forming an alliance with another firm is not as overt an act of generosity as making a payment to a firm using PWYW. Likewise, due to intertemporal considerations that may arise under even market-based exchange, a firm large enough that its purchases would meaningfully incentivize a supplier using PWYW or even keep it in business

could find it optimal to make a voluntary payment to the supplier just large enough to achieve these goals. However, this voluntary payment would almost always be lower than what the supplier could obtain by bargaining vigorously for the best price. Many corporations are also increasingly focused on social responsibility, sustainable supply chains, and double bottom lines. These forces might conceivably push a corporation to make positive payments to a supplier using PWYW. Yet, for the reasons stated above, the firm would probably need to make such voluntary payments an explicit part of its non-market strategy before its suppliers should consider adopting PWYW. Even in this situation, it is not clear that adopting PWYW would generate more profit for the supplier than a conventional pricing strategy.

Finally, it may be possible for small business owner-managers to adopt social exchange with each other. In this case, however, the line between businessperson and consumer is blurred, because the owner-managers would be spending their own money. Overall, then, although we do not categorically exclude the possibility that PWYW would ever work with business customers, PWYW is far more likely to be profitable when buyers are individuals purchasing for their own account.

Proposition 4. The type of buyer moderates the extent to which reciprocity, community, and display make PWYW more relatively profitable such that the effect of reciprocity, community, and display will be stronger if buyers are individual consumers than if they are businesses; PWYW will usually be impossible to implement profitably in business-to-business markets.

Frequency of Consumption

Once an initiation of reciprocity lays the basis for forming a social exchange, subsequent interactions maintain and increase the extent to which partners obtain a sense of fairness through their exchanges. In other words, the norm of reciprocity may not develop at first (Bercovitz, Jap, & Nickerson, 2006) but will tend to emerge after exchange partners engage in multiple rounds of transactions over time due to the possibility of reciprocating benefits from prior transactions

(Flynn, 2003; Lioukas & Reuer, 2015). As the partners repeat exchanges over time and commit more resources to their relationship, their commitment to the relationship will become normative (Lioukas & Reuer, 2015).

Moreover, as exchange repeats, exchange partners are increasingly embedded in social relationships, and the social bonds established between them deepen (Granovetter, 1985; Gulati, 1995). The repeated exchange also promotes mutual trust and dependence between partners, which further strengthens their social bond (Blau, 1964; Holm, Eriksson, & Johanson, 1999) and creates an affinity between other parties who are engaged in similar patterns of exchange in the same setting. The frequent interaction thereby provides ongoing opportunities to establish and maintain a pattern of not only dyadic but also generalized reciprocity, for the user to reaffirm a connection to a community and for the community to reciprocate, and for the user to reaffirm conformity to community norms and gain status through display. In this way, frequency may give social exchange a “taken-for-granted quality,” establishing and reaffirming a bilateral norm of reciprocity, a community norm of giving, and a unilateral habit of display.

In that regard, LVS users watch their favorite streamers several times a week, even every day for many hours, making interactions extremely frequent. Thus, LVS provides ample occasions to bolster the social exchange mechanisms that undergird how PWYW creates socio-psychological value for customers and, thus, induces them to make voluntary payments. Conversely, some products are purchased only on rare occasions by most people. Examples include infrequently-used household tools (e.g., a paintbrush), wedding rings, and automobiles. The resulting infrequency of interaction between buyer and seller strongly undermines social exchange mechanisms like reciprocity, community, and display. Even if users form a

consumption community for, say, a type of automobile, the infrequent opportunity for engaging in reciprocity with the seller or for displaying generosity may undermine PWYW.

Proposition 5. Frequency of consumption moderates the extent to which reciprocity, community, and display make PWYW more relatively profitable such that the effect of reciprocity, community, and display will be stronger if consumption is more frequent.

IMPORTANT ECONOMIC FACTORS AND PWYW

With PWYW, the buyer's ability to purchase the product for any non-negative price will tend to increase sales volume, often dramatically (Schmidt, Spann, & Zeithammer, 2015). Thus, economic factors that relate to sales volume, though important in every industry, are particularly important for PWYW and may act as boundary conditions for where PWYW is viable. We discuss two such economic factors here.

Marginal Costs of Production

Marginal costs always affect the economics of an industry but are particularly problematic for PWYW because the average price at which the buyers can purchase a product can be zero or far below the additional cost per unit. In this respect, PWYW faces a similar governance problem to communities oriented around the exploitation of natural resources (Ostrom, 1990) or technology platforms, especially those with collective governance (O'Mahony & Karp, 2020), for which free-riding is also a major concern. Behavioral research suggests that a significant percentage of people have a natural inclination to free ride (Kurzban & Houser, 2005), and on all major LVS platforms, non-givers outnumber givers.

The higher the marginal cost of producing an additional product or serving an additional customer, the greater the cost imposed by free riders on a firm using PWYW (Schmidt et al., 2015). Firms producing informational goods incur minimal marginal costs relative to firms producing physical products because the former involves virtually no cost of manufacturing,

warehousing, or shipping (Panico & Cennamo, 2020; Wang & Miller, 2020). To wit, the marginal cost of providing one additional digital copy of *Radiohead*'s album was virtually zero and, thus, the band was able to afford many free riders without abandoning their pricing model. With LVS, the marginal cost of an additional viewer is zero (although a large increase in users could impose additional bandwidth cost). In fact, firms that, like an LVS streamer, can serve non-paying buyers indefinitely may attract marginal customers who would otherwise have been priced out of the market (Bakos, 1998). As exchange repeats, a firm and its non-paying buyers may build social relationships (Blau, 1964), leading the buyers to comply with the norm of reciprocity in their exchange with the firm and start making voluntary payments. Eventually, making voluntary payments may become a habit.

By contrast, the marginal cost of most quick-service food and beverage products is low but enough to affect a restaurant's bottom line. This was apparently the primary reason that Panera Cares Cafés suffered losses from free riders. Although PWYW has worked for some restaurants (Kim et al., 2009), it has generated huge losses in others (Shanghaiist, 2018), much larger losses than would have been sustained if marginal costs were lower. In other industries, marginal costs are even higher. Consider an automobile dealership using PWYW and that non-paying customers frequently make up a large portion, often a majority, of customers. It is hard to imagine this dealership surviving for long, as opportunists arrived to buy its cars for \$1 and, perhaps, resell them in the secondary market. In general, high marginal costs are an important factor for the viability of PWYW.

Proposition 6. PWYW will be more relatively profitable, the lower are the marginal costs of production and will generally not be viable if marginal costs are not low.

Demand-Side Externalities

Demand-side externalities arise from the impact that a given buyer's purchasing behavior has on the value other buyers derive from the same product (other than by affecting the market price). Consider a telecommunications network. A positive externality arises if a new user makes the network more valuable by providing someone else to communicate with, whereas a negative externality arises if that new user's use of the network causes congestion. Scholars have long recognized that such demand-side externalities or network effects are important competitive forces in many industries (Shapiro & Varian, 1999). Externalities are especially important with PWYW because of the large number of free-riding or low-paying customers and the externalities they generate.

One notable example are the indigent customers at Panera Cares Cafés. These customers did not merely consume costly food without paying for it, but also their presence was regarded as undesirable by wealthier, giving customers, lowering their willingness to shop at Panera. That is clearly a negative externality by free-riding indigent customers on giving customers, which reduced payments to Panera. Conversely, free riders may create a positive externality for giving users on LVS. The reason is that free riders make positive contributions to the community on a given streamer's channel in other ways, for example, by chatting with the streamer and other users, enforcing community norms through social reinforcement and sanction, and serving as an audience for those who do give.

Another negative externality would arise with luxury goods sold using PWYW, because their value is based in significant part on their inaccessibility, which is in turn based on a high price and associated "exclusive" brand image. With PWYW, many more people would purchase the luxury good, undermining this exclusive image and, thus, the willingness-to-pay for the good

on the part of wealthier customers. *Radiohead*’s PWYW digital download is an ambiguous case. On the one hand, allowing free download reduced exclusivity, a negative externality, as with a luxury good. On the other hand, it created a larger audience for the album, as well as associated “buzz”; this in turn may have increased awareness, interest, and ultimately willingness-to-pay among customers willing to make voluntary payments. Taken together, the more positive the demand-side externalities, the better for PWYW relative to conventional pricing.

Proposition 7. PWYW will be more relatively profitable, the more positive are the demand-side externalities among buyers.

DISCUSSION AND CONCLUSION

Motivated by the emergence of PWYW, we proposed a theory of how social exchange foregrounds the socio-psychological mechanisms of reciprocity, community, and display, and may thereby create more value and generate more profit for firms than conventional market-based exchange. In a successful implementation of PWYW, these social exchange mechanisms have a twofold effect: (a) they create a large pool of socio-psychological value over and above a product or service’s use value, and (b) they constrain the buyer to share some of this additional value by making a positive payment to the seller. In consequence, both the seller and buyer capture more value than they would have in a market-based (or industrial) exchange.

Implications for Theory

We provided the first analysis in the strategy field of PWYW, a new and increasingly important business model in consumer-facing industries. We thereby add to a rich literature on business models (Massa, Tucci, & Afuah, 2017; Zott & Amit, 2008; Zott, Amit, & Massa, 2011) and emergent business practices enabled by social and technological trends (Aaker & Day, 1986; Amit & Zott, 2001; Balasubramanian, Ye, & Xu, 2020; Fisher, 2019; Gregory, Henfridsson, Kaganer, & Kyriakou, 2020). Additionally, we contribute to a literature on overcoming free-

riding in business systems. Whereas an existing literature on platforms shows how a free-riding problem in the supply of labor (e.g., in writing open source software) may be overcome by peer recognition, career concerns, and intrinsic motivation (Benkler, 2002; Lee & Cole, 2003; Lerner & Tirole, 2002; von Hippel & von Krogh, 2003), we show that a free-riding problem on the consumption side may be overcome by recasting market-based exchange as social exchange.

Our theory of social exchange as a means to create and capture value has important implications for strategy theory. Leading strategy theories like industry analysis (Porter, 1979) and value capture theory (Gans & Ryall, 2017) implicitly adopt a market-based exchange frame, which highlights the importance of acquiring bargaining power over transaction partners. Although psychological factors such as pride in owning a collectible or branded good can contribute to what makes a good valuable to a buyer and, thus, to her willingness-to-pay, she is assumed to want to acquire the good for the lowest possible price, which is facilitated by having bargaining power vis-à-vis the seller. The buyer thereby maximizes her value capture as the difference between her willingness-to-pay and the price she pays. Our theory explicates how the buyer's motivations are not just driven by value capture maximization, narrowly construed, but by social considerations of reciprocity, community, and display, which de-emphasize bargaining. Therefore, although existing strategy theory conceives of value creation (buyer and seller transact) and value capture (buyer and seller determine how to share value) as two distinct processes (Bowman & Ambrosini, 2000; Brandenburger & Stuart, 1996; Lepak et al., 2007), we show that value creation and value capture are in fact intimately linked through the socio-psychological framing of the transaction.

We would argue that the link between value creation and value capture extends beyond PWYW in its pure form and any need to incentivize parties to remain in business. If, as we have

argued, buyers’ voluntary payments under PWYW are positively correlated with use value, then PWYW has similarities to price discrimination under market-based exchange and may even be a way of enacting such price discrimination. Our examples of PWYW were also “tainted,” containing elements of both PWYW and more traditional pricing. To wit, some LVS platforms allow streamers to monetize their content through advertising as well as donations. Note also that streamers on different LVS platforms vary considerably in how much they rely on donations for revenue. For streamers at AfreecaTV, donations are the primary source of revenue (Ross, 2020). However, for streamers on other LVS platforms, advertising, a creator fund (TikTok), or merchandise sales may be more lucrative than donations. Thus, one could think of a continuum on which streamers using pure PWYW represent an extreme level of reliance on social exchange, canonical market-based exchange represents the other extreme, and many streamers using “tainted” PWYW are somewhere in the middle.

Moreover, one can wonder how prevalent pure market-based exchange really is. Consider a canonical market-based exchange like two parties, *A* and *B*, bargaining over a division of value. If *A* successfully captures more than half of this value, *A* may feel (a) guilt at having taken too much if the exchange is based on norms of fairness or (b) pride at having “won” if the exchange is framed as market-based, meaning that it is inherently competitive (Fiske, 1992). These affective reactions affect how much value *A* (monetary and psychological) derives from the transaction. We suggest that such socio-psychological value factors may be much more common than has been supposed in strategy. Our theory makes an important contribution by highlighting these factors in the context of PWYW and using the discourse of value capture theory to relate them to the strategy field’s understanding of value creation and value capture. This area is ripe for future research.

Implications for Empirical Research

There is clearly much more to understand about PWYW as a business model, what works and what does not. One would expect that culture would influence the salience of different aspects of social exchange (Cropanzano & Mitchell, 2005). For example, in collectivistic cultures, strong group identity and concern for preserving harmony and avoiding loss of face with others in the group (De Mooij & Hofstede, 2011) might raise the salience of community. Does this mean that PWYW will work better in collectivistic cultures or that PWYW should be implemented differently there?

Are there opportunities for differentiation between PWYW and non-PWYW firms? In the Korean LVS market, AfreecaTV is said to have a stronger community and gift-giving culture than does Twitch (Ross, 2020), such that users self-segregate into the platform with the norms they prefer. Anecdotally, one hears that streamers on Twitch in other countries have different norms with respect to gift-giving, some emphasizing it and others not.

Empirical research could also productively examine synergies between PWYW and conventional sources of revenue. One example already being implemented is AfreecaTV's combination of donations with advertising for low-income (mostly younger) users: the user watches an ad, and the advertiser makes a donation to the streamer on behalf of the user. *Radiohead* combined a successful PWYW digital download with a subsequent conventional physical release, but we do not know how much the success of the conventional release depended on the digital download and if so, why. One possibility is that the PWYW digital download served as a form of penetration pricing to establish legitimacy. In fixed-cost industries, PWYW might also be used to achieve scale. A firm could then turn to conventional pricing, much as *Radiohead* did.

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In a similar vein, PWYW helps establish strong social relationships and a high level of reciprocity and trust, ultimately leading a seller to learn much about the buyer’s preferences that cannot be easily observed or found in public sources (Harrison, Bosse, & Phillips, 2010; Uzzi & Lancaster, 2004). Indeed, PWYW payments may be correlated with a customer’s use value for a product. This private information can serve as a critical source of competitive advantage for firms (Adler & Kwon, 2002; Barney & Hansen, 1994; Ozmel, Yavuz, Trombley, & Gulati, 2020) and allow them to serve customers better (Harrison et al., 2010; Priem, 2007). To an extent, sellers using PWYW already use this private information by tailoring their offering to generate the most voluntary payments, something they can easily monitor in real time. Yet, we know little about other uses for this information or how best to exploit them.

Another issue of immense practical importance for firms considering PWYW is how to dispose consumers to frame their interactions with the firm as social rather than market-based exchange. Does foregrounding community in branding or advertisements help, as Panera tried unsuccessfully with its “community” cafes? Would cooperatives or artists with an anarchist or socialist message benefit especially from PWYW because of their existing “anti-capitalist” image? Would it help to remind consumers that the firm relies on donations to survive, as many charities do? Could mixing conventional revenue sources with PWYW interfere with social exchange. For example, executives and streamers at AfreecaTV have voiced concerns that excessive or intrusive advertising could undermine trust and the sense of community on the platform (Ross, 2020). There is much to learn about how to get the most out of the PWYW business model.

Implications for Practitioners

One of the key practical implications of this paper is that a business transaction can be interpreted not only as a market-based exchange between transaction partners but also as a social exchange whereby the partners reciprocate favors to make each other mutually better off. Providing socio-psychological benefits to customers, such as a sense of fairness, belonging, and public acclaim, may create more value with customers and generate more profits for firms. We suspect that, despite PWYW's successes, many practitioners do not know much about PWYW, much less feel comfortable with it.

For managers who are considering the PWYW business model, we suggest paying close attention to boundary conditions. Based on our analysis, for instance, PWYW may not be suitable for firms selling tech equipment to corporations (e.g., Dell, IBM, Cisco, etc.) due to the low potential to generate feelings of reciprocity or community, few opportunities for display, high marginal cost of production, and lack of demand-side externalities. Conversely, firms producing digital entertainment content—or anything with a low marginal cost so that free riders can be tolerated—may consider letting customers opt to pay the price they want, and leverage social exchange framing as a key element of their strategy.

PWYW and donation-based businesses are at the bleeding edge of practice and theory. If nothing else, we hope our efforts will stimulate more researchers to uncover the mysteries and implications of this new way of doing business.

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FIGURE 1. Value Creation Modalities

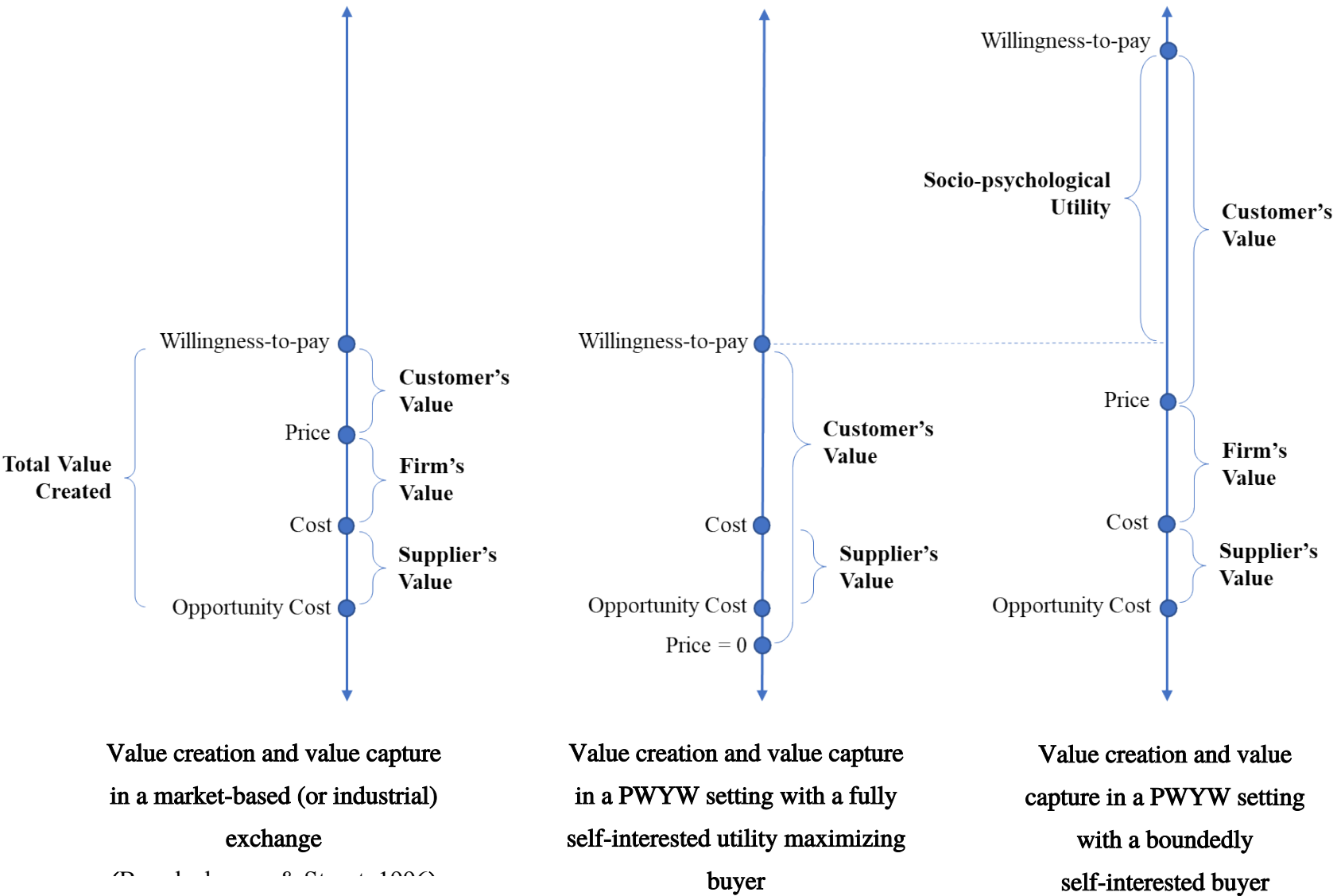
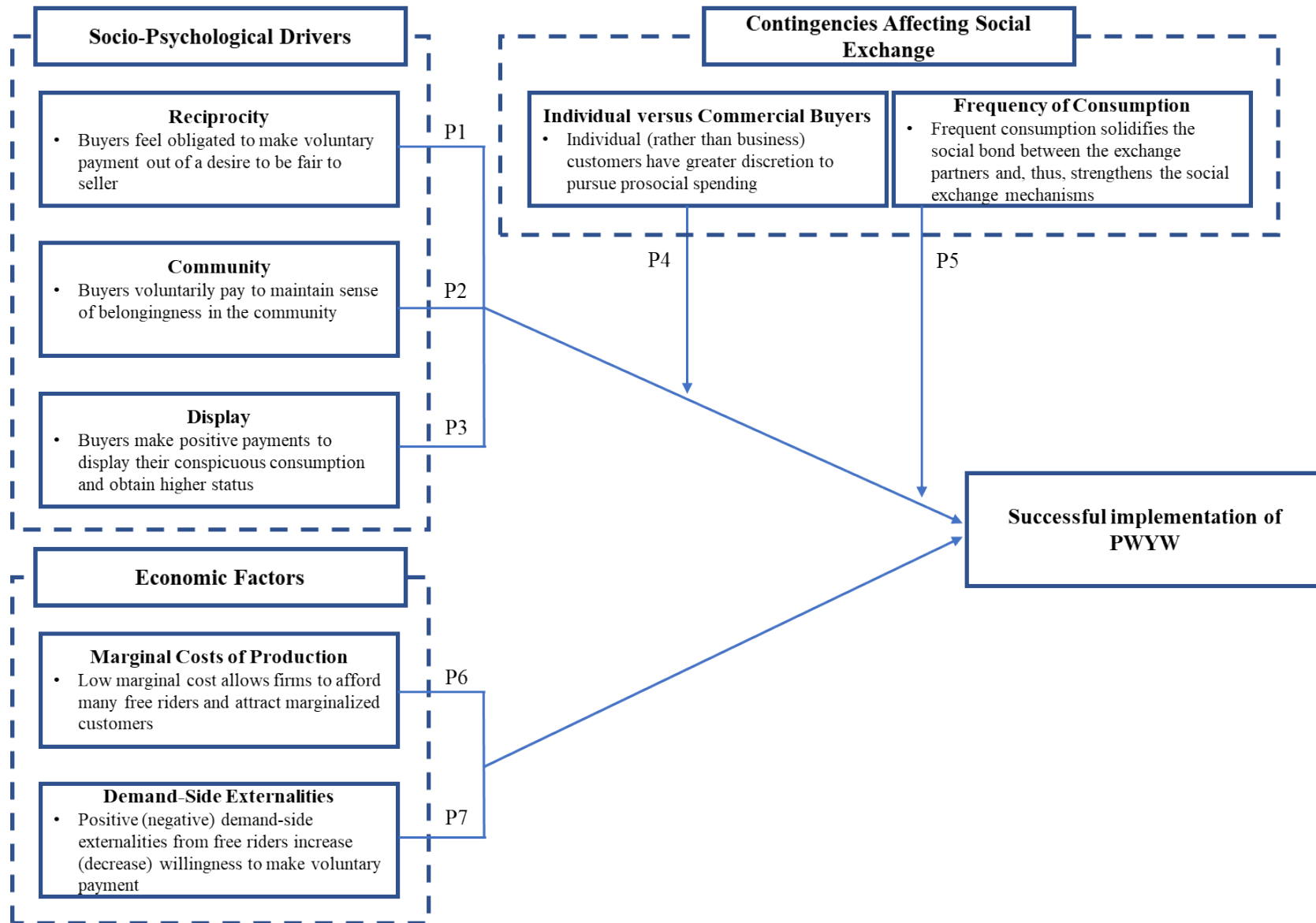


FIGURE 2. Theoretical Framework



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