

## **A Novel Architecture to Monetize Digital Goods**

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26 November 2014

2,622 words

The shift of commerce to the digital domain has forced many organizations to rethink their attitude to value creation, at times backtracking to the very question of what “value” actually means. Electronic commerce facilitates and thrives on social interaction, yet the way companies convert digital anything into cash they can bank seems to be stuck in time, obeying rules and practices that may have worked for physical goods but make far less sense today.<sup>1</sup>

To be sure, some visionaries spotted this inconsistency a while back and posited that “free,” and in particular the popular hybrid “freemium,” is the clever way forward. The idea is to leverage the absence of a price—in the short term, for a bare bones version of the offering, or for a select group of customers—to build a critical mass of users who are later persuaded to pay. Given that digital goods can be replicated at little to no cost, what is the harm? But the logic of giving stuff away today in the hope of a hefty payday tomorrow is not straightforward to implement, as finding the right mix between free and fee to balance the immediate need for growth and the ultimate desire for profit is tough.<sup>2,3</sup>

Other observers preach hard lines of “paywalls” or some softer version that includes metering. But again, if you consider the potential of digitization to deliver infinite variety, the thought of squeezing every customer’s needs and wants into one or few rigid prices implies that the seller is leaving a good chunk of change on the table or missing out on sales that at some lower price would still be profitable.

Perhaps the jury is still out on how well these approaches can perform. After all, freemium is by definition a long-term proposition, and The New York Times seems pleased with its paywall.<sup>4</sup> But case studies of hard times and spectacular failures are mounting, which begs the question: Can we do better?

We believe that earning revenue in the digital age needs a fresh approach. This short article seeks to lay the foundations and sketch one alternative. In particular, we present a pricing architecture that aims to move the exchange between company and customer from the impersonal, transactional space to the personal and relational. In this architecture, there are three building blocks: empowerment, dialog, and reputation. The hope is that businesspeople embrace our recommendations and mold them to fit their context and goals. The key is realizing that price is not an end in itself, but an instrument to balance perceptions of fairness. Early experience and ingenuity will certainly dictate which specific configurations prove most successful. To kick-start the debate, we introduce FairPay as one viable alternative.

### **Three building blocks**

Throughout most of the history of commerce, price was the outcome of a negotiation between individual sellers and buyers. Different buyers achieved different prices depending on their current situation, needs, and bargaining power. In other words, prices were very personal.

Starting in the 1850s, however, the shift to mass retail shoved this tradition aside. Shoppers no longer bought from individuals, but from organizations interested in standardization and scale. Indeed, the price tag gained popularity in the early 1860s with the arrival of the department store—John Wanamaker, the trailblazing American merchant and religious leader, opined that if everyone is equal before God, then everyone should also be equal before price. The company dictated terms, with prices set to maximize profit or some other objective and offered to the market on a take-it-or-leave-it basis.

Now that commerce is shifting back to personalization, it is interesting that one of its central ingredients, price, lags behind. Businesspeople appreciate that prices should be fitted to people’s personal valuations as they once were, but there is no real agreement on how this comes about.

Our suggestion seeks to undo the tyranny of fixed prices while retaining the efficiency inherent to

institutionalized commerce. The goal is to create an environment where company and customer explore different prices over time, searching for a point that is mutually perceived as fair. For this occur, we require three building blocks.

### *Empowerment*

Companies are embracing the idea of delegating activities to customers. We see it in product development and advertising, among many others. But what about pricing? Asking customers to participate in pricing decisions is empowering, and empowerment is known to foster engagement and satisfaction.<sup>5</sup>

Customer participation of course need not be an all-or-nothing proposition, as different pricing mechanisms involve customers to different extents.<sup>6</sup> But take for example the extreme case of pay-as-you-wish. Intuition suggests that letting customers dictate prices is foolhardy, practical only as a cute promotional stunt. Indeed, the thought of yielding any pricing power is often frightening to managers. In contrast, academic research and the experience of some businesses show that the selling context can be managed creatively to prime customers to pay fairly—even generously.<sup>7</sup> Not everyone takes a dry, self-interested economic perspective on exchanges. Rather, people can be driven by social values and norms (of fairness, reciprocity, and altruism), they respond to different styles of communication, and they can be swayed by how the choices are presented to them.<sup>8</sup>

### *Dialog*

Tapping the market for insight and feedback is good, intuitive advice. But how often does a company work to create a true dialog with its customers? And, even if there is a structure in place to communicate, how often does this structure inform the challenging task of moving from value creation to value capture? A pricing process also needs to be a learning process, one where the company gradually discovers what each customer (or, at least, each customer segment) values and why, and in return the customer perceives a willingness from the company to reciprocate with increasingly tailored offerings.

Modern e-commerce platforms can enable this sort of rich, automated, and personalized discussion. The technology is there, but in our mind it is currently underused. Two good examples are customer relationship management and social media systems, which are applied widely to manage interactions and build loyalty but rarely engage customers into meaningful conversations. Our suggestion is that pricing processes formalize and integrate dialogs about all things value—needs, wants, features, services, pain points, price levels, current and future transactions, etc.

### *Reputation*

Customer participation in pricing needs to be counterbalanced by feedback, a scoring mechanism that informs the company's decisions on when and how much discretion to grant. That is, the customer's power cannot be absolute. We propose to anchor this scoring mechanism on the concept of fairness, as the objective at all times is to focus company and customer on the need for outcomes that are mutually beneficial.

From the perspective of the business, a “fair” customer is one who pays sufficiently well to be profitable over the length of the commercial relationship. Instituting and tracking a “fairness rating” for each customer starts with the initial transaction and updates over the ongoing relationship, enabling the business to manage the allocation of pricing discretion over each purchase occasion (much like a credit score does). This practice can be used to put customers who are deemed to price unfairly on warning, and eventually even to exclude them from further participation in pricing. Similarly, it can be used to reward customers who are deemed to price generously with additional features, limited product offers, etc.

Note that customers are already being scored in the management of rewards programs and targeted sales promotion campaigns, to name but two examples. Our suggestion is a logical extension of this practice.

### **FairPay**

FairPay is our vision of how these building blocks can be combined in practice. This is how it works:

#### *Empowerment*

We take an extreme view: customers first experience the product or service and then set the price unilaterally. The FairPay offer is framed as a revocable privilege. That is, customers pay whatever they wish, including zero, but this freedom can be revoked at any point in the future if the company perceives that the relationship is not converging toward a price point that it deems fair for that particular individual. Standard fixed prices are used as a reference point to anchor customer decisions and as the fallback option for those who are excluded from making FairPay offers because of freeriding or ineligibility (the company may decide to limit the pay-as-you-wish privilege to certain customer profiles).

Note the sequencing of experience first and pricing later. The timing matters because customers should know the product they are asked to sacrifice money for. Moreover, to the extent that digital goods are experience goods, it eliminates the customer's tendency to discount for possible disappointment and fosters reciprocity—a strong social norm.

#### *Dialog*

The company posts a personalized reference price to guide the customer's price decision. If the customer chooses a price below this recommendation, she is asked to justify her decision. This can be done using simple choice templates suited for automation, personalization, and scalability. In addition, the company can attempt to prime generosity by providing additional information, such as the basis for the reference price (e.g., a statement of costs to appeal to the principle of dual entitlement)<sup>9</sup>, highlighting the opportunity for a mutually beneficial relationship, or simply promoting social comparison (via tables ranking different payments, a gaming component, etc.). Ahead of the next transaction, the company can provide reports to inform customers about usage and value received as well as counterarguments, if necessary, to progress the conversation.

The structured dialog within FairPay continues as long as the company accepts the customer's prices (in the context of the justifications that explain these prices)—a decision that is made by weighing the customer's fairness rating at that point in time against the company's internal criterion for continuing to extend the privilege to set prices unilaterally.

#### *Reputation*

In FairPay, a customer's fairness rating combines three elements: (1) the difference between the price recommended by the company and the price paid by the customer, (2) the customer's explanation(s) for this difference, and (3) relevant details of the transaction (e.g., the quantity and nature of use by the customer). This feedback is updated on every purchase occasion to reflect the changes in any of these factors. As mentioned, decisions can then be made periodically with respect to segments of customers; extending rewards (additional product tiers, perks, etc.) to customers with satisfactory fairness scores, and enforcing penalties (in particular, the threat to remove the ability to set the transaction price) to customers with unsatisfactory fairness scores.

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Building the necessary infrastructure to support a system such as FairPay may seem daunting at first, but

we want to be clear that it is possible to start simple. For example, one way to incorporate the prices paid by a customer into her fairness rating is to record the percentage deviation from the company's reference price, as percentages can be compared easily and meaningfully across occurrences. These data can then be adjusted to account for that customer's justifications and any relevant contextual factor, as described above, to yield the overall fairness rating.

The type of dialog we want companies to institute with their customers both draws on and generates what can be considered Big Data. The data that comprise the fairness ratings are critical for managing the pricing process itself, but can also be used for other aspects of the business. In fact, the fairness ratings gain value when aggregated across multiple companies. For example, an aggregator such as iTunes or Amazon, or alternatively a payment processor, can obtain fairness data across all of the vendors it serves and use it much like a financial institution uses background checks to establish credit limits: one's fairness rating from unrelated transactions can be used to decide how much leeway a company can grant in its particular context.

Finally, one question that often arises is whether customers can cope with the added cognitive load of participating in price setting. First, we care to point out that taxing customers' minds is not necessarily a bad thing; it can stimulate the type engagement that staves commoditization in a sector. Nonetheless, any possible problem can be managed by paying attention to how the dialog is structured, and how frequency it is prompted. Presumably, the first interactions will be the most challenging. But once customers gain familiarity, the pricing process can be updated in larger and less frequent batches, and with less effort. At some point, the company can also consider applying jointly-determined pricing "defaults" that make life easier for customers (but which can be overridden by either party whenever desired). Designed properly, an interactive pricing architecture can become highly intuitive very quickly and need not be more difficult for customers than deciding on how much tip to leave at a restaurant.

### **Looking ahead**

Much has been written about the relative merits and limitations of free versus fee in digital markets. In our mind, the basis for advancing the debate lies in a company's willingness to realize that customers today are not the passive price takers of yesteryears. We propose an architecture to monetize digital goods that tries to marry this reality with pragmatic business needs. Finding the right balance will certainly require some experimentation and adaptation, but the underlying goal is to create a more open, adaptive marketplace that lets sellers and buyers interact and learn about each other and, hopefully, reach outcomes that are mutually satisfactory.<sup>10</sup>

With this in mind, it may be wise for managers attracted to our architecture to move cautiously and limit the risk of cannibalizing existing revenue. For instance, a good start may be to implement a new monetization strategy for specific tasks such as customer retention, upselling (as a way to seek revenue from premium services, features, or perks), or customer acquisition (to broaden the market without simply giving away the bottom tier).

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- <sup>1</sup> For an exception, read M. Bertini and J.T. Gourville, "Pricing to Create Shared Value," *Harvard Business Review* 90 (June 2012): 96-104.
- <sup>2</sup> The idea of Freemium has sparked considerable debate. For arguments in favor and against, browse C. Anderson, "Free: How Today's Smartest Businesses Profit by Giving Something for Nothing" (New York: Hyperion, 2009); and S.J. Berman, "Not for Free: Revenue Strategies for a New World" (Boston: Harvard Business Review Press, 2011), respectively.
- <sup>3</sup> For a thoughtful article on the subtle mechanics of Freemium, read V. Kumar, "Making 'Freemium' Work," *Harvard Business Review*, 92 (May 2014), 27-9.
- <sup>4</sup> An interesting case study narrates the events leading up to the decision by The New York Times to institute a paywall—see V. Kumar, B. Anand, S. Gupta, and F. Oberholzer-Gee, "The New York Times Paywall," Harvard Business School case study 512-077 (2012).
- <sup>5</sup> For more on the relationship between pricing and customer engagement, see M. Bertini and L. Wathieu, "How to Stop Customers from Fixating on Price," *Harvard Business Review* 88, no. 5 (May 2010): 84-91.
- <sup>6</sup> The notion of a customer participation hierarchy, a ranking of the major pricing models by the extent to which customers are involved in the process, is developed in M. Bertini and O. Koenigsberg, "When Customers Help Set Prices," *MIT Sloan Management Review* 55 (Spring 2014): 57-64.
- <sup>7</sup> A thorough introduction to pay-as-you-wish pricing can be found in J. Kim, M. Natter, and M. Spann, "Pay What You Want: A New Participative Pricing Mechanism," *Journal of Marketing* 73 (January 2009): 44-58.
- <sup>8</sup> Read S. Santana and V.G. Morwitz, "We're in This Together: How Social Values and Relationship Norms Influence Buyer Payments in Pay What You Want Settings," Harvard Business School working paper (2014).
- <sup>9</sup> Read D. Kahneman, J.L. Knetsch and R.H. Thaler, "Fairness as a Constraint on Profit Seeking: Entitlements in the Market," *American Economic Review* 76 (September 1986): 728-741.
- <sup>10</sup> Additional information on the mechanics and varied uses of FairPay can be found at [www.fairpayzone.com](http://www.fairpayzone.com).