1. Introduction

In one sense, altering the information endowment of firms and their customers changes nothing: a consumer packaged goods manufacturer still needs to determine what customers want to buy, what competitors have on offer, what to offer themselves that both meets customer demand and is different from competitors’ offerings, and how to price their product given their own costs and competitors’ prices. An airline still needs to figure out how to attract the best mix of discount travelers, full-fare business travelers in coach, and premium passengers in front cabins, in the presence of price-pressure from corporate travel managers and in the presence of competition from other airlines.

And yet, in another sense, information availability changes everything! The cost of identifying customer preferences may be lower than in the past. The cost of communicating with customers surely is significantly lower, both because of the customers’ use of online search mechanisms and online rating services, and because of the firm’s use of direct email. In many industries the cost of tailoring products and services to customer preferences is significantly lower as well, because of the availability of information needed for precise, accurate targeting, and because the high information content of products being offered facilitates targeting. Each of these suggests that the value of being different has increased, since differentiation is more easily achieved and more easily communicated. Equally importantly, the competitive pressure on highly standardized commodity offerings has greatly increased. Thus, while the value from producing differentiated products and services is greater, the cost of failing to do so is greater as well.

We have introduced a term, hyperdifferentiation, that captures the increased importance of being truly different. Hyperdifferentiation can be described as “the art of reducing the importance of price as the principal determinant of customers' selection among alternative goods and services.” That is, hyperdifferentiation seeks to encourage customers to select goods and services based on deep delight, delight that provides value sufficient to
distinguish one offering from all of its competitors, so that the purchaser is less concerned with price differences between the selected product and the available alternatives. Significantly, this does not mean that all consumers will select the same product, or that one product is better or more valuable than the others; it simply means that each consumer will have a preferred product that he or she sees as better than all others, based on the specific product attributes that contribute to his or her delight. Hyperdifferentiation is increasingly important in a high-bandwidth world, since information availability increases price competition among products that are seen as interchangeable. Fortunately, hyperdifferentiation is also increasingly possible in a high-bandwidth world, since firms have better information endowment for making differentiation decisions and better mechanisms for communicating their differentiation strategy and their value proposition to existing customers and potential new ones. The idea of differentiation itself is of course not new; it is as old as marketing, and quite possibly as old as commerce. What is new is the degree of differentiation now possible, as well as the motivation for it. The value of differentiation is now higher, and the penalty for failure to differentiate is now more extreme. Once again it is important to note that hyperdifferentiation is not about being better in any absolute sense nor does it require being more expensive to produce; rather, it is about being better for each customer, and thus more profitable to sell.

The remainder of this paper is structured as follows. Section 2 provides a definition of hyperdifferentiation. Section 3 provides the motivation for our work. We next review the role of information for the customer making purchase decisions and the role of information for the service provider or manufacturer deciding what to offer and how to price it. We then review what we actually know, based on data and experience, and what we believe, based on anecdote and interpretation. We next provide some theoretical explanation for what we know and what we believe. We conclude with what we expect to happen next.

2. HyperDifferentiation Defined

In the presence of hyperdifferentiation, the customer is not making any compromise, but is getting precisely what he wants from a product. That does not mean he is buying a Rolls Royce convertible or a digital Nikon professional press photographer’s camera. It does mean that for the particular type of family sedan or point-and-shoot digital camera he is getting what he wants. In an automobile purchase this may be a specific combination of brand and image and color and styling, handling and acceleration, fuel
economy, and safety. For a camera it may be size and weight, ease of use, range of zoom, and number of pixels and quality of lens. Consequently, since the customer is making no compromise, his or her willingness to pay approaches the willingness to pay for the customer’s ideal product. I am willing to pay whatever I would pay for a perfect mid-size family sedan, or a perfect convenient consumer point-and-shoot digital camera. The product being considered has no effective competition, and thus the product’s price is determined by its value to customer rather than by the best competitor’s cost to produce. As we know from experience, this is seldom true either for cars or cameras, but the concept of matching the consumer’s ideal remains useful as a target, and as a metric for assessing how close a product, or a category, comes to exhibiting hyperdifferentiation.

Not all product categories are equally amenable to new hyperdifferentiation strategies. Some industries, like cosmetics, probably have maintained hyperdifferentiation strategies for decades. Others, like inter-city scheduled bus service have little room for hyperdifferentiation; the tight budget constraints of most bus customers ensures that price, and price alone, will be the basis of competition. Between these two extremes — industries that already exhibit a high degree of hyperdifferentiation and industries for which little hyperdifferentiation is possible — lies the industries and the products that we wish to explore here. Many will be consumer package good products, such as beer and ice cream, or experiential services like hotels and resorts. Although it will be more complex to implement hyperdifferentiation strategies in durable goods like automobiles and appliances, we believe that this will occur as well. Any product that can be made in numerous varieties, and that can be sold to consumers who do not all value the same varieties equally, has the possibility for hyperdifferentiation.

3. Motivation for HyperDifferentiation Research

Three hypotheses interact to motivate hyperdifferentiation research. First, the Efficient Electronic Market Hypothesis suggests that the failure to differentiation will become greater and greater, and thus potentially catastrophic to producers of undifferentiated goods and services.

Efficient Electronic Market Hypothesis

As transparency reduces search costs making consumers better informed about prices available in the marketplace, competition increases and margins on commodity products and services will drop to zero.
As an example we have selling the third Harry Potter novel, *Prisoner of Azkaban*, on the Net. Both Amazon and Barnes and Noble offered the book for advance purchase at a 50% discount, which means that they were selling the book at precisely the publisher’s cost to them. Worse yet, when Barnes and Noble decided to ship the book with overnight delivery to all customers without additional charge, easily done from their array of local book shops and distribution centers, Amazon had to match with free overnight delivery as well, which entailed free Federal Express shipment to customers throughout the US. Zero-profit pricing with free Fed Ex added has got to be a nightmare example of what undifferentiated service offerings will imply in the future.

Next, the **Winner-Take-All Hypothesis** suggests that for many goods and services, we will all get what we want, and the rewards will go to those who are able to persuade customers that they are better. The motivation for this hypothesis is provided by experience in entertainment, where digital media allow entire markets to watch the best athletes and the best performers in general. The rewards for the best opera tenors, NBA guards, or popular vocalists have never been greater.

**Winner-Take-All Hypothesis**

As electronic replication and electronic reputational effects increase, all profits go to the best. Consumers only watch what they really want to see.

In contrast to the winner-take-all hypothesis, hyperdifferentiation suggests that we will not all want to listen to Luciano Pavarotti sing, or to watch Allen Iverson shoot, or to sit through a Britney Spears video, but that we will pay for whatever it is that we want, and those who offer something that people do not truly want will be unable to sell it.

**HyperDifferentiation Hypothesis**

As transparency informs service providers and manufacturers, there will be something for everyone who wants it. As transparency reduces search costs, we can all find what we want. We will pay for what we want, and only for what we want.

This doesn’t mean that what is made will be in some absolute sense *better or more expensive*, it simply means that we will offer a better fit for each customer’s preferences. And it does not mean that we will try to delight every customer, or even to delight
every frequent customer; rather, we will delight those customers willing to pay for what we produce. In short, hyperdifferentiation is not about charity or virtue, although it may indeed be both virtuous and good for consumers; hyperdifferentiation is about profit!

4. Information and HyperDifferentiation

Delight is personal; we do not all love the same things. Consequently, information profoundly increases the degree of differentiation possible and the degree of differentiation that firms will consider desirable, by increasing firms’ ability to differentiate their offerings and customers’ ability to locate the offerings that they value the most.

The Efficient Electronic Market Hypothesis implies that with easy search and easy comparison, those providing identical offerings will earn very little. Our example of this was online booksellers, selling Harry Potter novels at zero margins. In contrast, the Winner Take All Hypothesis says that the rewards for truly differentiated offerings have never been greater, as an ever-increasing number of customers can locate what they want; our example of this was artists and entertainers, such as J.K. Rowling and the rewards for having written the Harry Potter novels that are now available online. The HyperDifferentiation Hypothesis contradicts only part of the Winner Take All Hypothesis, noting that while consumers will purchase only what they truly want, we will not all want the same thing. This hypothesis suggests that the ability to market hyperdifferentiated offerings has never been greater, which also implies that the rewards for being different will in general not be as great for all producers as they are for mass market entertainers. None the less, the same basic argument holds for the hyperdifferentiation hypothesis and for the winner take all hypothesis, and thus the rewards for providing differentiated offerings are, indeed, larger than ever before. Two simple examples will help explain this.

Why be different if nobody can find you? Walter Kunitake is a third generation coffee grower in Kona on the Big Island of Hawaii. His coffee is among the most highly regarded in Hawaii, and among coffee fanciers is regarded as among the finest estates in the world. Before the net, Walter sold his coffee to blenders and retailers in Kona, and the price he got was determined by the market price for coffee in Hawaii. Walter can now easily be found by searching the net, and like other top growers such as Marin and Cathy Artukovich of Koa Coffee Plantation and Merle and Cathy Wood of Wood Captain Cook Estate, he now uses the net to offer his coffee direct to consumers.
throughout the world. The Kunitakes, Artukoviches, and Woods now enjoy much higher prices for their superior coffees; likewise, their customers now enjoy much better coffee. Everyone is better off, but none of this would be possible without the net, or without some equivalent form of low cost search and direct distribution. In brief, there is no advantage to being different if no one can find you, and it has never been easier to find what you want than it is today.

Why be different if no one actually knows? Victory Beer brews beers that are significantly different from the mass market beers of its largest competitors; Victory’s beers are also significantly more expensive to produce and thus they sell at higher prices to consumers. As we noted in a previous paper, the Big Three brewers — Bud, Coors, Miller — grabbed the center of the beer market and tightly clustered their offerings around the mass market middle. Rather than differentiate their products in a real sense, which might have limited their appeal to some consumers or increased production costs, they attempted to differentiate largely through advertising. The reliance upon advertising had the added advantage of creating real economies of scale, since only the largest brewers could mount effective ad campaigns to compete. Indeed, it is widely accepted that the massive consolidation of the US beer industry, where three companies accounted for almost all domestic production, is in part explained directly by this phenomenon.

Although a causal relationship has not been shown, it is interesting to note that the trend to consolidation was initially halted and then reversed at the same time that information availability to producers and consumers would have created pressure for hyperdifferentiation strategies in the US beer market. We note that all of the following have been observed:

- Manufacturers have plugged the gaps, making beers that are different from existing beers. Victory Hop Devil has a greater concentration of hops, and a higher degree of bitterness, than were available from other American beer brewers at the time of its introduction.

- Manufacturers have spaced themselves out in product attribute space. Flying Fish has carefully avoided making a pale ale like Sierra Nevada Pale Ale, and they have carefully avoided producing anything that competes head-to-head with their geographic neighbor Victory. There are enough different ways to be different. Why be different in the same way that your competitors have
chosen to be different, and thus create a price war with them, when you have carefully avoided a price war with Budweiser or Coors?

- Manufacturers have found a way to inform the customer about the beers that they are offering. There is no way for Victory to put an effective ad campaign behind each of its dozens of beers. Indeed, there is no way that Sam Adams, or Sierra Nevada or any of the smaller micro breweries could mount any promotional campaign to compete with the $500,000,000 that Anheuser Busch spends on advertising. Fortunately, it is not necessary for them to do so, since the detailed value proposition of each of Victory’s beers and each of Flying Fish’s beers can readily be located by potential customers via Ratebeer.com.

With a hyperdifferentiated product, having customers love you is good. Victory is delighted when a reviewer gives Hop Devil a perfect 5.0 rating and declares that this is what an IPA is supposed to taste like. Of course, with a hyperdifferentiated offering, customers hating you sometimes happens as well. Some customers will give Victory products ratings that are at or near the bottom of the scale, and some will use words like “gross” and “horrid” to describe the beers. Unlike traditional mass marketing, which wants products to be acceptable to the largest number of customers, producers following a hyperdifferentiation strategy are not dismayed when their product is hated, since having a product that is sufficiently mainstream to be liked by all is no better than having a product that is hated by all. Liking a product in a hyperdifferentiated marketplace is not sufficient reason for a customer to buy it; he or she must actually love it before he or she will select over its competitors and before he or she will pay the higher price that hyperdifferentiated offerings command.

Victory learned the importance of being loved rather than liked very early in its company history. Among the first three beers it introduced was the differentiated and apparently risky Hop Devil and the mainstream and apparently safe Victory Lager. Hop Devil was like nothing else in the market and it succeeded beyond its brewers expectations; it now accounts for over 2/3 of Victory’s sales. Victory Lager was no more and no less than a lager done well; it can be thought of as a perfect Budweiser. Perfect or not, Victory Lager is also a marketplace failure; customers like it, but do not see any reason to pay the significant price premium relative to Bud.

In a differentiated market it is better to delight someone than merely to please everyone. So avoid middle, stake out vacant position, and let a newly efficient market produce your rewards.
5. **What do we know?**

What do we actually know? Experience with music CDs suggests that increased availability of information does indeed increase consumers’ purchase of music CDs, that the effect is measurable and statistically significant, and that this effect varies among different consumer groups.

Anecdotally, this makes sense. A consumer is more likely to buy unusual and unfamiliar music if he or she can sample it first. Disks like “A Feather on the Breath of God (Abbess Hildegarde of Bingen)” and styles like The Chieftains (traditional Irish), Black Watch (Traditional Scottish), Klezmer (Traditional eastern European Jewish) and Gamelan (traditional Javanese and Balinese) are easier to sell if consumers can listen to them before they buy.

The availability of information does not affect all groups of consumers equally. When high speed internet access was made available, purchases by the *base group* of the study — college age single females — had an increase on average of 1.46 CDs each six months, above the baseline of 4.29, for an increase of 34%. Those consumers with an MP3 player saw an additional increase of .56 CDs. In contrast, those who already were best informed — those who already knew enough about music and recordings to have done the bulk of their music purchases by mail order before the net was available — had the smallest change. When high speed internet access was provided the semi-annual purchases of this group increased by only .2 CDs on average. These figures are reflected in table 1, below.
Table 1.—Incremental impact of high speed internet on the semi-annual CD purchases of various consumer groups.

The fact that not all consumer groups are equally affected by increased information suggests that retailers and distributors might need to reconsider their marketing strategies. That is, while increasing information availability may increase sales, not all groups will respond equally. Although firms have historically targeted promotions at their largest customers, the results summarized in table 1 suggest that firms might consider targeting informational programs at those consumers most likely to increase their purchases as a result of increased information. This is shown in figure 1, below.
Figure 1.—The values of different targeting strategies. Providing more information to customers who are larger buyers will increase sales. Providing more information to customers who value the information but are less likely to search for it themselves likewise will increase sales. Thus the optimal strategy is to provide information to those customers who represent a balance between size of expected purchases and incremental impact of additional information on their purchases, in order to get the greatest increase in total sales.

Additionally, we do know that manufacturers are actually diversifying their product offerings. While we do not yet know why, their behavior is indeed consistent with knowing what competitors are offering and seeking to maintain some distance between their offerings and those of competitors. Figure 2 shows action game data from
before 2000 and figure 3 shows action game data from after 2000\textsuperscript{1}.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{A two-dimensional projection of games in product-attribute space, with data taken from action games available before 2000.}
\end{figure}

\textsuperscript{1} The data shown here are actually two-dimensional projections of more complex multi-dimensional data. The orientation chosen for viewing is the one that maximizes the visible distance among points. The easiest way to envision what has been done here is to imagine graphing a set of points representing a circle in a three-dimensional space, centered around the point $x=y=z=0$. The circle is created by points that lie in the plane $z=0$, that is, the normal plane that would be used in drawing something in two dimension space. When viewed from this normal perspective we see a circle. When viewed from a plane rotated by 90 degrees we see the circle from the side, that is, we see a line. From any other vantage points we see an ellipse. The data displayed in figures 2 and 3 uses a projection that maximizes the visible distances, and minimizes the collapse into straight lines.
Figure 3.—A two-dimensional projection of games in product-attribute space, with data taken from action games available after 2000.

We see here that games got farther apart, effectively reducing competition, at the same time that manufacturers downloadable demos became more practical to provide on line. Games really are more differentiated; the average distance between games has increased by 8%; comparing only 1998-2000 to 2001-2003 the distance has actually increased by 19.5%. This increased distance among games thus occurred at the same time that game developers were becoming better informed about competitors’ offerings and at the same time that they were becoming better able to communicate the attributes of their games to potential buyers.

6. What do we think we know?

Experience shows that Amazon.com’s book sales websites showed a clear progression, quickly adding book reviews from customers, and then incorporating sample pages and even sample chapters on line. Clearly this was not motivated by competition among books since Amazon is concerned more by how much you buy than by which
books you buy, so Amazon executives must believe that providing more information increases Amazon’s sale of books. Likewise, we have seen Amazon add customers’ review of CDs, and then begin to provide sample MP3 cuts on the website. As with book sales, Amazon is more concerned with total sales than with which CDs customers buy, so executives once again must believe that providing more information to consumers with increase Amazon’s sale of CDs. Music samples online had to wait for more bandwidth to be available to consumers. Amazon currently provides customers’ reviews of videos and CDs that it sells, and if experience is a good guide, when more customers have even more bandwidth, online MPEG clips will be widely available. All this suggests that when consumers have more information their purchases increase.

Can more and better information increase the sale of experience goods more generally? While hard data are not available, the proliferation of webcams at luxury hotels suggests that property owners and property managers believe that it can.

It is interesting at this point to consider whether reducing uncertainty can actually decrease sales for any products and services. The answer appears to be that it can, but again our experience is more anecdotal than statistically significant. Think of products with a spectacular upside if they really work as you hope that they will, such as a new putter that will cause you always to align your putts correctly or a new driver that will add 30 yards to your drive while keeping you in the fairway. These products may actually deliver as promised for some golfers, but they probably will not work for the average golfer, who cannot read the greens correctly, or who does not have the swing speed to benefit from the new clubface technology. These customers may buy the products because they will work for some golfers; with better information they would not buy the products because they will not work for them. This difference, in some sense the difference between hope and reality, is the reason why many golfers have so many drivers and putters in their garages and basements, and more accurate information could actually reduce the sale of these products.

7. A Theoretical Explanation

Defending two propositions helps explain the claims made in sections 5 and 6 above. Proposition one concerns products that the customer believes are near his or her ideal point; that is, it addresses products for which the customer’s range of uncertainty about the product attributes spans his or her ideal point.
Proposition One

Increasing the information available to a customer increases the customer’s willingness to pay for a product that is near the customer’s ideal

Assumption: A customer’s willingness to pay decreases with distance between product and customer’s ideal

Figure 5 shows a customer considering a product for which he is uncertain about the actual product characteristics and hence he is uncertain about the actual value of the product to him. He knows the range that the product characteristics can take, and thus he knows the average location that he can expect the product to have in some product attribute space, but there is a broad range of possible values for the product’s characteristics and hence a broad range of possible product value to him. The location of the customer’s ideal point — the collection of product attributes he would value most — is on the left of the range, about 1/3 of the way into the product range. As is clear from the figure, the highest value the customer could realize would occur for products near his ideal point, and moving away from this ideal point in either direction reduces the value of the product to him. The average value of product locations in the range to the left of his ideal is shown by the height of X, the average value of product locations in the range to the right of his ideal is shown by the height of Y, and the average value overall is thus simply the point on the line connecting X and Y that falls directly below the customer’s ideal point. The customer’s expected value from purchasing this product is significantly less than his ideal value, because the long tails of the range, far from the ideal, have value significantly less than the value of the customer’s ideal product. Thus the customer’s willingness to pay, based on expected value, is reduced by this large uncertainty.
Figure 5.—A customer’s valuation for a product with a high degree of uncertainty, where the range of locations of the product in its product attribute space spans the customer’s ideal point. The horizontal axis represents the location of the product in its attribute space and the height of the thin blue lines represents the value that a specific individual consumer places on a product at a specific location on the horizontal axis. This value is highest near the consumer’s ideal point and falls off with distance from this ideal point. X and Y simply represent the average valuation of products that turn out to be located in the left and right tails, and the asterisk between them represents the expected value of products distributed uniformly somewhere throughout the range of uncertainty.
Now consider the implications of reducing the customer’s uncertainty concerning the actual range of locations that can be realized by the attributes of the product being considered. Importantly, reducing the uncertainty about the range does not alter the center of the range, or the expected location of the product in its product attribute space. But we significantly improve the expected fit of the product with the customer’s desires by reducing the length of the tails and eliminating those product attribute locations that most significantly reduce the value of the product to the consumer considering purchasing it. The new expected value to the customer of products in the left and right sides of the range are shown by X and Y on the graph in figure 6. The height of X and Y are both higher than in figure 1, and the height of the point connecting X and Y that falls directly below the customer’s ideal point likewise is higher as well. Reducing the customer’s uncertainty does not alter the expected location of the product but it does increase the expected value of the product to the customer.
In summary, the principal implication that can be derived by comparing these two graphs is that when the customer has increased access to information this increases the customer’s willingness to pay for offerings that approach his or her ideal point, and thus increases the value of differentiation strategies for the producers of these goods and services.

In contrast with proposition one, proposition two concerns products that the customer believes may be far from his or her ideal point; that is, it addresses
products for which the customer’s range of uncertainty about the product attributes does not span his or her ideal point.

**Proposition Two**

- In a hyperdifferentiated market place, increased access to information decreases the customer’s willingness to pay for product that is far from his or her ideal.

  Assumption: With many choices available, a customer’s willingness to pay for products and services falls off quickly when the fit between these offerings and his or her ideal product location decreases.

Consider the product choice situation represented in figure 7. The consumer has an extremely wide range of uncertainty about the location of the product in its product attribute space. And, significantly, the range of locations the product can have is bounded by but does not span the consumer’s ideal point. We make one other assumption — we assume that this is a hyperdifferentiated market, and the consumer’s post-purchase regret for less-than-ideal products will be quite high, because of the opportunity cost associated with buying products far from his or her ideal. That is, any product sufficiently far from the consumer’s ideal will have no value at all; it is a beer that will not be drunk, a driver or putter that will not be used, or a video game or music CD that will be used only once. Here the large range of values greatly decreases the customer’s willingness to pay, even more so than would be the case with more constant reduction in value as the distance between the product location and the ideal product location increases.
Now consider the product choice situation represented by figure 8, in which the expected location once again is not close to the customer’s ideal product location. The expected value from purchasing the product with this high degree of uncertainty is, of course, significantly less than the customer’s ideal value. Once again, uncertainty creates tails with rapidly increasing fit costs and rapidly declining product valuation. Interestingly, in this hyperdifferentiated environment, with the customer’s valuation for a product declining rapidly as the product’s distance from the customer’s ideal product increases, reducing uncertainty reduces customer’s willingness to pay even further. The intuition behind this is clear. Reducing uncertainty eliminates those product locations nearest too and farthest from the customer’s ideal point. Eliminating the product locations closest to the customer’s ideal has an enormous impact on the product’s expected value, since these points were precisely the points that contributed the most to the customer’s high
valuation of the product. Eliminating the most distant points does not offset this reduction in value; the points eliminated that were far from the customer’s ideal are only slightly worse than the average valuation for the larger range, while the points eliminated that were close to the ideal are exactly those points with valuation much higher than average. Thus, reducing uncertainty in this situation reduces the customer’s willingness to pay.

In summary, the principal implication that can be derived by comparing figure 7 and 8 is that when other producers have already differentiated their offerings, increasing the amount of information and the accuracy of information available to consumers increases the pressure on producers to further differentiate, or even to hyperdifferentiate, their offerings. The reasoning behind this is simple; as we have seen, increasing the information available to consumers reduces their willingness to pay for goods and services that do not precisely fit their needs or their desires.
Figure 8.—A customer’s valuation for a product with a low degree of uncertainty, where the range of locations of the product in its product attribute space does not span the customer’s ideal point, and where valuation falls quickly as distance from ideal increases. Here the reduction in uncertainty actually decreases the customer’s willingness to pay.

In summary, these two propositions tell us the following:

- Increasing the information available to consumers and reducing their uncertainty increases their willingness to pay for products that are near their ideal points. Thus increasing information available to consumers increases their willingness to pay for differentiated goods and services and increases the value of hyperdifferentiation strategies.

- Increasing the information available to consumers and reducing their uncertainty decreases their willingness to pay for products that are not near their
ideal points. Thus increasing information available to consumers decreases their willingness to pay for undifferentiated goods and services and increases the penalty for failing to implement hyperdifferentiation strategies.

8. Extensions for Future Research:
Competitive Effects

Not all industries will exhibit the hyperdifferentiation phenomenon that we describe here.

• In some industries, like pharmaceuticals, the desire for hyperdifferentiation has always been present, but the change in information availability is not likely to have profound impacts. Firms have always wanted to produce wonder drugs, and firms have always wanted to distinguish their offerings from lower-priced generics. That said, the principal cost of developing pharmaceutical products remains biological and medical research, not advertising. The increase in information available to firms on consumer preferences will not change the way drugs are developed; the search for AIDS / HIV drugs, or more recently SARS drugs, is not contingent on web-related customer research, nor will marketing of these drugs benefit from hypothetical sites like ratedrugs.com.

• In other industries, like automobile manufacturer, the cost of the car remains a significant factor, to be sure. But customization and microsegmentation are greater possibilities than in the past and are more plausible than custom-tailored drugs are in the near term. Moreover, net-based marketing efforts may be essential to allow purchasers to determine precisely which cars are targeted at them and most attractive to them.

• And in still other industries, the change in information availability will represent a source of competitive advantage for incumbents. Service providers with ongoing relationships with customers will know better than competitors what to offer each customer; this will be especially important in industries where the products have a low emotive content or excitement value, like banking services, where customers may have strong preferences but are unlikely to be aware of them or to search out competing offerings. An incumbent can delight a customer and earn more, while an attacker would have little idea what to offer. The key to profitability here is to give the
customer those things that are most important to him or her, while earning profits from these same customers elsewhere. If some customers are more concerned with fees than with interest rates, give them lower fees and retain more interest income from them; if others are more concerned with interest than with fees, the reverse strategy will please the customer while assuring profits. This is the advantage that comes with knowing how to delight.

- Equally important as an incumbent’s source of advantage is knowing whom to Delight. Hyperdifferentiation is not about charity, or delighting all customers, or delighting all customers equally or despite the expense. Hyperdifferentiation is about delivering delight to some customers, in order to maximize the profits of the firm. Anecdotal evidence suggests that American Express Concierge for the Road Warrior and American Airlines Frequent Flyer programs have done a good job of deciding whom to delight. But guessing wrong, or implementing an egalitarian delight strategy, is likely to result in winners curse, where the unlucky winner is investing in delighting those low profit customers that no one else wishes to retain.

9. Summary and Conclusions

As we noted in the introduction, differentiation is not new, but hyperdifferentiation indeed is. Firms have always wanted to achieve the greatest degree of differentiation, to reduce direct comparisons and thus to reduce pure price competition. Without differentiation, products are purchased largely on price; with hyperdifferentiation, each product approaches a monopoly, and purchases are based on value and willingness to pay, not on competitors’ costs. Obviously, firms have always wanted to achieve monopoly profits, and firms have always wanted to implement and to sustain differentiation strategies; why would we expect to see an increase in differentiation strategies today? We have attempted to provide two answers:

- Because now firms have to. The pressure created by transparent electronic marketplaces, in accordance with the efficient electronic market hypothesis, will reduce profits for firms that fail to differentiate their offerings and will do so to an extent that is unprecedented. The failure of many eBusinesses, and the systemic lack of profitability in many entire eIndustries like securities trading, underscores this.
• **Because now firms can.** Information now available to producers allows them to determine where competitors have clustered and what product locations are currently unoccupied. It allows them to determine what consumers want, that is, which unoccupied locations in product attribute space would actually have buyers. And today’s information technology allows producers to communicate with consumers, letting each consumer know what they have on offer, reducing consumer’s uncertainty, and increasing each consumer’s willingness to pay for products that really are what that consumer wants.

That is, information availability creates both the pressure to differentiate and the capability to do so. The pressure to differentiate comes from three sources. Direct comparison will destroy the profit of commodities, beginning the move to hyperdifferentiation. Moreover, once consumers become accustomed to getting what they truly want, their dissatisfaction with products that do not meet their requirements will be increased, and hence their willingness to pay for products that do not approach their ideal will be greatly reduced. The only products that will earn significant profits are those that approach some consumers’ ideal points and have been able to communicate this fit to those consumers. Likewise, the capability to differentiate has three sources. Firms can now determine what competitors are producing and what consumers want, and they can communicate their value propositions more easily.

We predict that this move to hyperdifferentiation will increase product diversity, that it will increase producer prices and profits, and that it will increase consumer satisfaction. The informed customer will pay more for what he wants; the informed customer will experience increased delight with increased information. Informed firms will earn more, and thus margins can increase for incumbents, who are better positioned to design offerings for customers whose preferences they already know.