The belief that strategic design leads to improved firm competitiveness is broadly recognised in contemporary research. However, much less is understood about the precise, concrete mechanisms by which organizations translate their design-based resources and capabilities into higher performance. This paper provides context to this relationship by introducing the variable of pricing power as a potential element of unobserved “dark matter” that clarifies how design-based differentiation results in product performance. Pricing power is described by Stephan Liozu (2019) as “the ability to increase prices without losing demand”. Remarkably, nowhere in the vast literature on pricing is design mentioned, while in parallel pricing has not appeared to be of particular interest to strategic design researchers. In an effort to spur further interest in this variable a case study is provided, illustrating the process footwear and apparel brand Nike employed to leverage design-based differentiation to support the pricing power of a new offering.
Introduction

Most product managers intuitively recognize the role strategic design management plays for their organization’s competitiveness and financial performance (Buehring and Liedtka 2018; Buchanan 2015; Borja de Mozota 1998; 2006; Chiva and Alegre 2009). The academic literature in business management has also come to acknowledge the benefits of design-based differentiation as a method to translate overall firm strategy into distinctive elements of a product’s form that allow them to stand out from those of rivals. Among such features are a product’s shape, material, texture, colour and ergonomics, as well as holistic ‘meaning making’ (Verganti and Oberg 2013; Lardoni, Dell’Era, Ferraloro, Peradotto, Karlsson, and Verganti 2016). However, while the potential advantages of strategic design management and design-based differentiation have been broadly described in research the precise tangible concrete ways design translates into firm-level competitiveness and performance is far less understood. Indeed, a recent study by McKinsey suggests that more than 66% of CEOs “…don’t fully understand what their senior designers do” (McKinsey Design Index 2018). Accordingly, the purpose of this article is to extend the observation (attributed to IBM president Tom Watson) that “good design is good business” (from Hertenstein, Platt, and Veryzer 2005) by drawing attention to the oddly overlooked relationship between strategic design management and the most important driver of firm competitiveness and financial performance: Pricing power. Pricing power is defined as “…the ability to increase or maintain prices without losing demand” (Liozu 2019), which appears to be a decent depiction of design’s role in organizational strategy.

More specifically, this paper provides context to the common view in research that the mere ownership of design-based resources and capabilities within an organization leads to higher performance (Hertenstein, Platt, and Veryzer 2005; Erichsen and Christensen 2013). What has been missing in most discussions is a clear description of how design leads to performance—What concrete mechanisms explain the broadly-observed phenomenon (e.g., Verganti 2003) that “design-driven” firms tend to outcompete their rivals? This paper proposes that the concept of pricing power, and customer-value based pricing more specifically, represent the broadly unobserved “dark matter” by which design-based differentiation driven by strategic design is translated into performance. Remarkably, nowhere in the vast literature in business and economics focused on pricing does the concept of design appear, nor does the variable of pricing seem to be of particular interest to strategic design management researchers. This apparent paradox implies that firms lack a shared common language to account for the role strategic design management may play in their organization’s ability to maintain pricing power through design-based differentiation.

The following sections of this article provide a background review of the salient literature as it relates to pricing and pricing power before linking those concepts to strategic design management, broadly, and design-based differentiation, more specifically. Secondly, the connection between pricing power and design-based differentiation is illustrated in a case study describing how footwear and apparel brand Nike employed design-based differentiation to support the pricing power of a new offering in the basketball sock context. Lastly, findings for the case study are related to existing research and potential avenues for future research are discussed.

Background

The literature in business strategy provides three generally accepted approaches to pricing commonly referred to as the “3 Cs”: cost-based, competition-based, and customer-value-based (Hinter-
Generally, discussions of pricing strategy assume that most organizations adopt the stance of either cost-based pricing, by focusing on the margin of their offerings (the difference between the costs of producing a product and the price at which it can be sold to customers) or competition-based pricing, setting prices by benchmarking relatively close similar products. Historically, these methods have appealed to firms who have been instructed by business orthodoxy to optimize pricing efficiency through maintaining desired margins relative to input cost projections, market share targets, and/or tracking the pricing moves of close competitors (Hinterhuber and Lizou 2015). However, as many researchers have noted (e.g., Krishna, Feinberg, and Zhang 2007) the effectiveness of cost-based and competitor-based pricing has diminished over time as firms contend with the converging effects of what strategy researcher D’Aveni (2010) has termed the “Commoditization Trap”. Indeed, a study by Simon-Kucher and Partners (2016) based on a survey of 3,900 pricing executives found that more than 65% perceived that their organizations had less power over setting prices than they had in the past, and more than 75% of respondents had experienced increased pricing pressure in the last two years. This ongoing devolutionary downward pressure results in a dilemma were, as soon as you improve the quality or other features of your offering, your actions will immediately be matched by others and generally at a lower price point… you will then get squeezed between the need to lower your own prices to stay competitive and the steadily rising costs... Commoditization means you become unable to charge more for what you have to offer… The conventional answer to commoditization is to differentiate (D’Aveni 2010, 73).

Considering this backdrop, it seems peculiar that the dramatic extent to which market-leading design-driven organizations such as Nike, Apple, Procter & Gamble, Coca-Cola, Ford, AirBnB, GE, Uber, Philips, Dyson, SAP, Tencent (Design Management Institute 2015) and others appear to have achieved the benefits of customer-value-based pricing has received so little attention in the pricing literatures. In parallel, few depictions of these firms from the design perspective mention pricing or pricing power in association with the success that these firms have achieved through effective use of strategic design management (Borja de Mozota and Wolff 2019) and design-based differentiation (Micheli, Wilner, Bhatti, Mura, and Beverland 2019; Scaletsky and da Costa 2019). Clarifying the connection between these two areas may provide a useful lens for developing a new and better understanding of how strategic design may provide a powerful foundation for overall firm competitiveness.

**Design Management, Strategic Design Management, and Design-based Differentiation**

An ongoing shift in business research is to portray design’s role within firms as a “managed process” (Bruce and Bessant 2002; Gruber, De Leon, George, and Thompson 2015) alongside other more traditional areas of organizational strategy such as finance, operations management, marketing and innovation (Buehring and Liedtka 2018; Micheli, Perks, Beverland 2018). Accordingly, the concept of Design Management, broadly defined as “…the organizational and managerial practices and skills that allow a company to attain good, effective design” (Chiva and Alegre 2009) has received increasing scholarly attention. Thus, if, “design is strategy made visible” as Brigitte Borja de Mozota and Clipson (1990) suggest, then design-based differentiation represents the concrete, tangible outcomes of strategic design management’s ability to translate user needs into value as the emotional appeal, aesthetics, styling, ergonomics, quality, and meaning of a product’s form that allows it to stand out from those of competitive rivals (Gruber, De Leon, George, and Thompson 2015; Dell’era
and Verganti 2009). This ability to create design-based differentiation acts as a powerful strategic resource (Borja de Mozota 2003) to support pricing power through what Smith (2016) describes as the ability to...

...unilaterally define and extract prices without regard to direct competitive pressures. It requires that the firm is able to deliver a product or service to the market that competitors cannot easily replicate.

In order to address the lack of clarity around the relationships between strategic design management, design-driven differentiation, pricing power and commoditization this paper has adopted a case study research methodology. Robert Yin (2014) describes case study research as a method of enquiry that examines a phenomenon in-depth and within its real-world context. This paper utilizes a single case design based on interviews with managers focused on the role of “managed design” (Gruber, De Leon, George, and Thompson 2015) within the particularity and complexity of a single phenomenon in order to develop understanding within particular circumstances (Stake 1995). All interviews for the case study were conducted in confidentiality, and the names of interviewees are withheld by mutual agreement Yin (2014) advocates the single case approach as a way of investigating a phenomenon with sufficient depth in order to accurately understand the causes and effects of concepts as they interact, as well as understanding the context and process in order to foster new hypotheses and research questions. Therefore, the research question posed in this case study is how firms may develop links between strategic design management capabilities that can be translated into design-based differentiation which results in the ability to maintain pricing power? The following case study provides a first step towards clarifying the nature of the complex relationships between those particular concepts by reference to the example of the Nike Elite basketball sock.

Case Study: Nike Basketball Elite Socks—“How Do We Get Paid For This?”

In 2008, the basketball sock marketplace was considered by consumers to be largely homogenous. The product was purchased in bulk and firms found it very difficult to create any meaningful differentiation from rivals. Indeed, packs of six pairs of socks were commonly offered at a retail price of less than US$ 5.00. Despite the clear commoditization in the marketplace, Nike saw an opportunity to introduce a technically advanced sock that delivered higher performance,

Socks were 100% commoditized. However, we are a consumer-obsessed, athlete-obsessed, product-obsessed, design obsessed company. We heard from our elite athletes that something better was needed. At that time, around the 2008 Beijing Olympics, the main competitor who had the NBA contract to provide socks to the league offered just really cushy cotton socks, so most of the players wore custom orthotics in their shoes and two pairs of bulky, heavy, hot socks and that was ‘good enough’...These new socks blew them away. The performance simply blew them away... So, we had a validated consumer insight/ known performance advantage from an athletic standpoint and a marketplace that didn’t care, or didn’t know how to care... The big question was, again: How do we get paid for it?

The Elite sock began as an example of Nike’s commitment to the athlete through performance,

The innovation lab had developed socks based on foot strike patterns of different sports—running is very linear while basketball and soccer are very lateral sports—we had built the best performing basketball sock ever made, I truly believe that, it had arch support, they took padding out of the arch to hold the foot in place, they had padding in pressure zones, when you jump-stop on a court the foremost of the
foot jams into shoe, they added padding where the shoe rubs against the ankle bone, there were cooling zones where material was taken away to allow the foot to breathe—they built the Cadillac of socks called the Elite Sock, but the market says, 'I pay US$.50.' It was a real challenge.

These sentiments typify the types of struggles many firms face translating their capabilities for creating technical innovation into concrete performance outcomes. One of the key contributions of the strategic design literature over the last decades has been to emphasize the role of design as a tool to focus and direct firm resources to meet customer needs, to stand out from competitive rivals and contribute to firm profitability. For Nike, Nike needed an approach to pricing that would maintain the brand’s premium positioning, capture the immense performance value imbedded in the offering while somehow persuading customers accustomed to paying less than US$1 for a pair of socks that there was an opportunity for a new higher-priced product.

Through the consumer research we found that a basketball consumer was spending $150 for shoes and they were wearing $.50 cent socks. 6 pair packs for $3.00... We’d ask them about their shoes and what are you going to wear? And they would point to the laundry basket and say, 'I’ll just find two clear ones out of there...” ... This seemed crazy, what you have is floor – shoe – foot... and the only thing in between the shoe that we spend hundreds and thousands of hours designing was a crappy piece of cotton you bought for $.50... The Nike elite sock was the first sock that broke down the door for other mainstream, broader sports. No one had done that.

So, when we built our pricing structure we knew that although we had some elasticity in consumer demand, US$.50 is a pretty tough price point to come from, and considering the product costs and the positioning we thought it needed to be to convey that ‘premium-ness’ and the additional value it was going to be bring in terms of performance benefits for the athlete.

Figure 1: The Nike Elite Basketball sock. Source: Nike News (news.nike.com).
The issue for Nike was how, exactly, could the technical and innovative improvements embedded in the Elite sock create a compelling value equation for consumers?

I remember sitting in the office of the Global Creative Director for Nike Basketball at the time along with the Design Director for Socks and we were talking about this great thing, but it is white and all the technology is below the ankle... the designers had done some great zonal stitching that made the sock compelling, but it was all covered up by the shoe... There was no visual cue to demonstrate the extra value where anyone else was going to see it... So how do we get credit for this thing? No one could see what the big deal was, no fan and especially when a consumer went into a retailer how could it make it not look like every other tall white sock...?

The answer for Nike appeared to be create design-based differentiation.

Our product design team, performance people, and the engineers built the best performing sock ever made, and then design-wise we had to figure out how to get people to notice: So we starting getting some ideas out for design elements—visual cues that would support an authentic story to backs up why it exists, other than the performance benefit. So, someone had had the idea in the shooting shirts that we had developed for some of the elite teams that had “family” written in Morse code on the arm sleeve (…- .- - - ... -. -.-) and it was a really cool looking. We loved the subliminal story—it represents how a team is a family and how you fight for each other and have ups and downs together. But it was just buried in there on some shirt that no one ever really noticed it... We thought we could take that interpretation of Morse code and use it to tie the socks into the system of dress and stand out for customers. For example, if you hold up the original elite socks and the main basketball shoe at the time, the Nike Hyperdunk, at the back of the collar of shoe there was a little notch in the design, the dot-dot-dash on the elite sock fits perfectly as an extension of that cue... Visual identification on the Nike Basketball Elite Crew socks with a unique logo on the back of the sock, which became a universal identifier and design language for the socks that carries on to this day.

Design-based differentiation has been described as method to translate firm strategy into elements of a product’s form through elements such as shape, material, texture, colour and ergonomics, as well as a holistic means of ‘meaning making’ (Verganti and Oberg 2013; Erichsen and Christensen, 2013). The Elite sock provides a clear example of how design-based differentiation allows an offering to stand out from competitors by creating additional symbolic and experiential value for customers. However, in addition, this example also highlights the crucial role pricing power plays as the concrete variable that captures that additional value as performance. The firm was forced to shift its natural emphasis on internal pricing strategies and look externally from the perspective of their customers,

We thought about it for a long time and we tried a bunch of different models, of course we do differentiation all the time, but we hadn’t really ever tried to figure it out in a commoditized market... but what eventually seemed to be compelling from the customer’s perspective was to charge about 10% the price of a shoe. The shoe is obviously what is driving things, but we thought—and customers actually probably believed too—that the socks and shoes should be considered together; So, if the Hyperdunks are at US$110, then the equivalent Elite socks should be about US$11, which is the pricing that we landed on as the right customer value that would allow us to pass these innovations on to our customers, but at a pricing model that would make it sustainable for us.

This passage hints at the role of pricing power as the “dark matter” of design-based differentiation. As Nike’s former-CFO, Don Blair describes,
‘One of the changes that we made over the last five years or so is really focusing on the consumer as we set price... it’s about the value equation that we’re trying to create with the consumer (Barrie 2014, 11).

In far too many discussions of the importance of pricing design is left out of the discussion, and as a consequence, designers it seems may be missing an opportunity to communicate the strategic and competitive value which they create. Nike recognized that using design-based differentiation they had the capacity to shift the basis of competition in the marketplace. The answer to commoditization in this case, as is likely true in most markets, was not to simply focus on the technical or utilitarian attributes of the product, but rather, to consider the customer-based value the new offering provides:

The story is powerful because we had all the tools—we had the design expertise, we had the user insights, we had the business case but it wasn’t a market that we thought was a place we could be so successful because socks were a commodity, it was a completely commoditized space. I love talking about these socks because frankly, pricing of LeBron James basketball shoes is not interesting, we can charge whatever we want. Socks was an unsexy category that we had to work to intentionally provide that value—real value and perceived value; the product value, the aesthetic/visual value, and the retail partner value to get them out there in front of the consumer.

Discussion, Conclusions, and Directions for Future Research

The provided case study illustrates some of the reasons why "managed design" (Gruber, De Leon, George, and Thompson 2015) and customer-value based pricing is so problematic for many organizations. This paper provides context to research that suggests that design resources and capabilities do not on their own necessarily lead to improved organizational performance (Borja de Mozota 2003). Rather, strategic design management acts a crucial lever focusing the innovative product design efforts of firms into design-based differentiation (Dell’era and Verganti 2009). Margaret Peteraf and Jay Barney (2003) argue that the resource-based view (RBV) of business strategy results from not simply the existence of critical resources but rather the ways that those resources are used in a superior way. The Nike Elite socks case study appears to provide a vivid example of the critical role strategic design management (Buehring and Liedtka 2018; Buchanan 2015; Borja de Mozota 1998) provides design-driven firms with a complex “bundle of resources” that provides a powerful source of competitive advantage based on their value, rarity, and inimitability (Barney 2001). In addition, this paper provides much-needed clarity around how design-driven firms are able to direct their design-based resources/capabilities to product offerings to performance by highlighting the concept of pricing power as a concrete means for capturing the singular design-based resources and capabilities that create perceptual and symbolic value (Lizou, Hinterhuber, Boland, and Perelli 2011).

Specifically, an important aspect of the design-based differentiation of the Elite socks was that they were intended to be worn by customers as part of the overall Nike “system of dress”. In this system the Elite socks were to be worn in combination with warmups, uniforms, leggings, arm sleeves, and shoes linked to the sock in a very clear aesthetic coordinated around a set of design cues encouraging the consumer to see the socks, and the overall “system of dress” as “suiting up for battle” before a game, where as our interviewee described,

...you put on your supportive gear and protective gear that tied in to your uniform and you became part of an army, your army, your team, you are a
warrior ready for battle and the socks perfectly tied into the whole story.

These types of market knowledge associations are likely to be potent sources of pricing power because they are tied to the value co-created between a consumer and a product—i.e., the emotional, mystical and transcendent benefits of the Elite socks, immaterial qualities that imbue the offering with quintessence, intrinsic properties that are so uniquely perfect as to be without equal, completely distinct from competitor offerings.

In his classic description of organizational strategy Michael Porter (1985) draws a distinction between firms who are able to maintain pricing power from those who cannot as either zero-sum competition, where a lack of perceived differences drives competitors to face pressures to offer lower-and-lower prices to preserve market share, and positive-sum competition, where firms and their offerings compete on salient differences, rather than price. This paper provides a first step in the direction towards greater recognition of design-based differentiation deriving from strategic design management as a key, yet overlooked, element of positive sum competition distinguished by firm pricing power.

Bibliography


Liozu, Stephan M. "Customer value is not just created, it is formally managed." *Journal of Creating Value* 3, no. 2 (2017): 200-209.


Smith, Tim J. *Pricing done right: The pricing framework proven successful by the world’s most profitable companies*. John Wiley & Sons, (2016).


Yin, Robert K. *Qualitative research from start to finish*. Guilford publications, 2015.
Bio

Ian D. Parkman is an associate professor of Marketing at the Pamplin School of Business at the University of Portland. He teaches undergraduate- and MBA-level classes in Marketing Strategy, Marketing Research, and New Product Design and Development. His research interests focus on marketing strategy, design-driven innovation, the creative industries, and knowledge-based product development. He has published his work with the Journal of Brand Management, dmi: Journal, Journal of Design, Business, & Society, dmi: Review, among others. He holds an MBA from the University of New Mexico, and his Ph.D. is from the University of Oregon.