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Defining design orientation: A field-based discovery approach

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ABSTRACT

The value of design as a means of innovation has long been recognized. More recently, interest in how design can create value has moved from a functional to a strategic focus whereby the design concept defines the way in which the whole firm competes. This is known as "design orientation," although research on the nature of this construct remains scarce. In this exploratory study to define and unpack the nature of design orientation we follow the same process as previous research on orientations, through extrapolation from the sustained behaviours at firms that use design to drive their strategy. Empirically, we ground our definition in insights from design experts and senior managers (n = 62) within a diverse sample of "design-oriented" firms (n = 26). We identify that design orientation consists of an overarching ethos defined by four core emphases (connective, empathetic, future, and aesthetic), reflected in and reinforced by eight behaviours (catalysing, integrating, perspective taking, marrying logics, disrupting, future-proofing, design language, and brand reinforcing). In so doing, we define the design orientation construct and identify the strategic investments firms can use to leverage it for competitive advantage. We provide an agenda for future research and explore managerial challenges associated with implementation.

1. Introduction

Buoyed by anecdotal and scientific evidence of the performance benefits of design (Brown, 2008; d'Ippolito, 2014; Hart et al., 1989; Hertenstein et al., 2005; Luchs et al., 2016; Veryzer and Borja de Mozota, 2005), over the past three decades writers have called for greater investigation into how design can be diffused across the firm to enhance competitiveness (Beverland and Farrelly, 2007; Borja de Mozota, 2003; Brown and Katz, 2011; Hatchuel et al., 2006; Roper et al., 2016). This has been called strategic design, where the logic and tools of design move beyond problem-solving in innovation projects to define how the firm creates value (Micheli et al., 2018). Others have drawn on the logic of organizational orientations (Micheli et al., 2019; Noble, 2011) to identify that firms that embrace design as an organizational ethos stress particular behaviours and approaches to the challenge of resource acquisition in the market (cf. Varadarajan, 2017). However, the nature of design orientation remains unclear, with numerous authors calling for exploratory research to bring greater clarity to this construct and how firms can integrate design into strategy (Candi, 2016; d'Ippolito, 2014; Micheli et al., 2019; Noble, 2011; Ravasi and Stigliani, 2012).

This is the purpose of this paper.

It is important to note how we approach "design" and "orientation," especially as they interrelate. In the context of this research, design relates to an ethos and associated behaviours that create value (Liedtka, 2015; Micheli et al., 2018), as opposed to the design of things or how design can enhance processes (e.g., NPD) (Hatchuel et al., 2006; Perks et al., 2005; Simeone et al., 2017; Swan et al., 2005), or what has more recently become known as "design thinking," or the tools designers use for problem solving (Micheli et al., 2019; Ravasi and Lojacono, 2005). An orientation reflects a certain predisposition that drives subsequent activities and/or a means to organize the firm internally to address its needs (Varadarajan, 2017; see also Hunt, 2012). That is, when organizations adopt a particular orientation, they place particular emphasis on behaviours and investments to frame and address market opportunities and challenges. Organizational orientation is conceptually different from "organizational design," which "involves decisions about the configuration of the formal organizational arrangements, including the formal structures, processes, and systems that make up an organization" (Nadler et al., 1997, p. 48) and presents "a systematic approach to aligning structures, processes, leadership, culture, people, practices, and

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metrics to enable organizations to achieve their mission and strategy" (Burton and Obel, 2018, p. 3). While organizational design is about "prescribing how an organization should be structured in order to function effectively and efficiently" (Burton and Obel, 2018, p. 2–3), an organizational orientation "implies that firms are facing toward some things in their environments. By virtue of "facing toward," firms pay more attention to certain issues, problems, and opportunities than to others." (Hunt, 2012, p. 10).

Drawing these together, we contend that a design orientation consists of a distinct ethos (i.e., guiding values and beliefs) and associated behaviours embedded across the firm that enable value creation through the development of novel solutions and supportive systems and processes. Building on pioneering work on market orientation (Kohli and Jaworski, 1990), and guidelines for establishing complex constructs (Carpenter, 2017), we adopt a field-based discovery approach involving extant literature and extensive practitioner interviews to address a deceptively simple question, "what is design orientation?" Consistent with previous work on orientations (Gebhardt et al., 2006; Narver and Slater, 1990; Rindfleisch and Moorman, 2003; Slater and Narver, 1995), we address our research question by identifying the behaviours that reflect and reinforce an organization-wide ethos (Hunt and Morgan, 1995).

The article is organized as follows. First, we frame our inquiry by drawing from the literature on strategic design and the process of defining a market orientation to provide the basis for our questions, method and sampling frame. Second, we provide details of our modified grounded theory approach. Third, we present the findings, defining design orientation as an organization-wide ethos characterized by four emphases and eight behaviours. We conclude with a discussion of our theoretical contributions, limitations and research agenda, and managerial implications.

2. Theoretical framing: strategic design and market orientation

In exploring design orientation, we draw together two strands of literature: strategic design and market orientation. First, although few works have dealt with design orientation directly, writers on strategic design provide useful insights for framing our inquiry. Second, research on market orientation helps identify the process by which we can conceptualise a new orientation, including construct definition and research design. In particular, this research proposes that while an orientation is embedded in organizational culture, it can be identified through shared behaviours (Homburg and Pflesser, 2000; Kohli and Jaworski, 1990; Narver and Slater, 1990; Varadarajan, 2017). That is, we would expect design-oriented behaviours to be both reflective of, and reinforce a cultural ethos defined by design.

2.1. Strategic design

Practitioners and academics have long discussed the potential for a "designerly approach" to strategy (Cooper et al., 2011; Liedtka, 2015; Lockwood, 2010; Martin, 2009), competitive positioning (Dell'Era and Verganti, 2007; Verganti, 2009), and innovation management (Beverland et al., 2016; Hatchuel et al., 2006; Micheli et al., 2012). The idea that designers have a unique way of approaching problems was discussed by Simon (1969, p. 4) when he linked thinking and doing in his definition of design. Subsequently Buchanan (1992) highlighted design's ability to question the existing order, create the new, and solve wicked problems as points of distinction *vis-à-vis* the natural and social sciences. More recently, this approach has been termed "design thinking," defined by IDEO President Tim Brown (2008, p. 86) as a strategic approach that "uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity."

The focus on an organizational-wide role for the logic and practices

of design has been called "strategic design," described by Micheli et al. (2018) as the contribution of designers to shape the firm's direction in consultation with other core management functions. The authors contrast strategic design with "design as service" which focuses on the distinct contributions of the design function to product or service innovation projects. Instead, strategic design focuses on the potential of design capabilities to influence key strategic goals such as enhancing the customer experience, creating distinct marketplace assets (such as brands) and contributing to overall organizational effectiveness (Borja de Mozota, 2003; Gemser et al., 2011; Hertenstein et al., 2005; Luchs et al., 2016; Luo et al., 2014; Simeone et al., 2017).

Consistent with our emphasis on orientation, some writers have identified how design practices can define organizations and their strategies. Hatchuel et al. (2006) suggested the term "design orientation" could capture design-driven strategies, rules and cultures. Candi (2016) suggested an added emphasis on design can reshape the innovation activities that help define the firm's competitive position. Beverland and Farrelly (2007) identified that some organizations are "design-led," where the culture of design is embedded throughout the company. Micheli et al. (2018, p. 642) identified "design as the dominant perspective" whereby design sets the direction of the firm. Finally, scholars focusing on the value of design employ orientation-like terms (e.g., firm preferences, investments, or identity) when describing firms that are more invested in design (Gemser and Leenders, 2001; Hart et al., 1989).

Despite these studies enhancing our understanding of design's role in the firm, the strategic design literature is beset with a lack of definitional clarity, measurement and empirical investigation (Noble, 2011; Ravasi and Stigliani, 2012). To the best of our knowledge, one definition of design orientation exists. Venkatesh et al. (2012, p. 219) define design orientation as "an organizational vision" that "includes the set of conscious, reflective, and creative ways of conceiving, planning, and artful making of products and services that generate value for the customers and enable them to engage in their individual or social endeavours, whether these be utilitarian, functional, material, communicative, symbolic, or experiential." Although this definition identifies design orientation as a form of organizational identity that drives behaviour, it also focuses primarily on one type of production ("artful making"), is not sufficiently distinct from definitions of customer orientation (Slater and Narver, 1998), and with its emphasis on NPD reflects a "design as service" approach (Micheli et al., 2018).

Nonetheless, these pioneering efforts help frame the present inquiry. First, design orientation is an organization-level construct involving the widespread diffusion of the logic of design through distinct value-producing behaviours. Second, design orientation offers a different way for organizations to create value. As a result, and third, design-oriented firms place an emphasis on design in their investments, identity, strategic intent, and espoused beliefs. With these clarifications in mind, we respond to calls to identify and unpack the nature of design orientation (Micheli et al., 2019; Noble, 2011) to identify how design may be used to enhance a firm's competitive advantage (Hobday et al., 2012).

2.2. Market orientation

Pioneering research on market orientation proved valuable for how we approached the research and conceptualization of design orientation. Both Narver and Slater (1990) and Kohli and Jaworski (1990) identified that there had long been calls to implement the marketing concept across organizations, out of the belief that doing so could enhance firm competitiveness and financial performance. They called the organization-wide implementation of the marketing concept "market orientation" and used a modified grounded theory approach that drew on the extant literature and interviews with experienced marketing practitioners to define the construct. Kohli and Jaworski (1990) established that market orientation was defined by an emphasis on three

behaviours, namely market intelligence generation, dissemination, and responsiveness. Adopting a different approach, Narver and Slater (1990) identified that three behaviours—customer orientation, competitor orientation, and interfunctional coordination—reflected an underlying organizational culture. Subsequent research confirmed the critical significance of core cultural beliefs, such as the market as raison d'être, as vital to a market orientation becoming embedded across the firm (Gebhardt et al., 2006). Drawing on what became an influential body of research, Varadarajan (2017) concluded that for market-oriented behaviours to hold relevance across the organization over time, they must reflect and reinforce firm culture.

Considering orientation more broadly, and further highlighting the role of overarching culture as well as key behaviours, Varadarajan (2017) identified that an orientation consists of a predisposition (i.e., design or marketing) that drives subsequent activities and aligns the firm internally to address its needs. Also, that an orientation should cover the entirety of the firm's operations and therefore be related to key organizational-level outcomes such as performance. Drawing on this research we would expect to see re-occurring evidence of the attributes and tools of design in the day-to-day practice of employees regardless of organizational function, including for example marketers (Beverland et al., 2016). Therefore, in defining design orientation, a focus on stated organizational preferences and actual behaviours is critical. Such preferences and practices should either be enduring and/or have resulted from some significant change in direction across the organization (Gebhardt et al., 2006); a focus on enduring behaviour may reflect an orientation, while shifts in preferences or emphases (and behaviours) may represent an attempt to change orientation. These needs frame our research design.

3. Methodology

We address our research aims using an exploratory, field-based qualitative research design. We do so for several reasons. First, the lack of a clear definition of design orientation calls for a theory-building research design (Goffin et al., 2019). Second, given the lack of a definition, we start from a similar position to Kohli and Jaworski (1990) in their pioneering study of market orientation (Carpenter, 2017). Third, untangling issues of culture and behaviour, and the relationship between the two is often best served by depth interviews (Schein, 1990).

We developed a two-stage research design. The first stage involved a pilot where we (1) tested our research instrument, (2) explored key issues for further elaboration, and (3) identified potential firms to sample. Drawing inspiration from the foundations of market orientation (Kohli and Jaworski, 1990), it involved expert interviews (n = 13). The second stage involved interviews with senior managers (n = 62) in 26 firms, primarily drawn from Australia (AUS) and New Zealand (NZ). During the time of data collection, the notion of "being design-led" was emerging in both economies as a new means of competing. Thus, we sampled experts who were at the forefront of this debate and subsequently also drew on firms held to be exemplars of design leadership (as recognized by the experts, press coverage, awards, and formal design leadership audits by national governing bodies) and firms judged by the experts to be moving towards a greater emphasis on design at a strategic level (Micheli et al., 2018). To enhance validity and reliability, we engaged in population checking (n = 25), presenting results to informants and other managers in design-oriented firms.

Details of the experts are provided in Table 1. These experts had at least ten years' experience in commercial design and were recognized thought leaders, being publishers, adjunct educators, judges of design awards, senior members of design councils, and/or historians of local design. The expert interviews were free-ranging and consisted primarily of grand tour questions that enabled informants to answer on their own terms (McCracken, 1988). Interviews were primarily with senior managers as they are viewed as critical carriers of culture (Schein, 1990) and most were conducted by the second author. On average the interviews

Table 1
Phase 1 expert sample.

Pseudonym (Location)	Professional role	Experience	Primary client industries
Donnie (NZ)[a]	Owner design consultancy, practicing designer, senior member of national design council	30+ years	Technology, food, fashion, services
Molly (AUS)	Owner design consultancy and practicing designer	10 years	Automotive, household equipment
Mick (NZ)[a]	Design writer and historian and former designer, senior advisor national design council	40+ years	Household equipment and industrial tools
Jeffrey (AUS)	Design educator and active designer	25 years	Automotive and engineering
Anna (AUS)	Design educator and practicing designer	10 years	Furniture and engineering
Annabel (AUS)	Owner design consultancy and practicing designer	10 years	Fast moving consumer goods, professional services
Joel (NZ)	Owner design consultancy and practicing designer, senior member national design council	20 years	Business to business
Martin (AUS)	Owner design consultancy and practicing designer	25 years	Airlines, major consumer and business services
Brandt (AUS)	Owner design consultancy and practicing designer	25 years	Fast moving consumer goods, fashion
Maude (AUS)	Owner design consultancy and active designer	35 years	Government, architects and furniture
Vladimir (AUS)	Editor major design magazine and former designer, senior advisor national design council	15 years	Print media and fast-moving consumer gods
Jackie (NZ)	Design educator and practicing designer	15 years	Technology and consumer services
Dave (AUS)	Design educator and practicing designer, senior member national design council	40 years	Furniture and automotive

[a] Interviewed in population checking phase.

lasted 90 min and were recorded and transcribed. Broad questions were used in the early stages of interviews, such as what the respondent considered to be the meaning of "design-led," and probes were used to follow up lines of enquiry or clarify key meanings or ideas.

20 firms from AUS and NZ were selected (out of a larger list of initial cases) for the second stage based on the expert interviews, plus a review of the commercial literature in both countries (the second author read the complete collections of local design publications), histories of local design, and reviewed the design-leadership auditing awards. A further six firms from the US, UK and Japan were interviewed after the first 20 as a form of further theoretical saturation, to "test" out emerging ideas, and as a form of population checking. The resulting sample of 26 firms, detailed in Table 2, include a wide range in terms of age, size, scope, and industry sector.

Background research was also carried out on the sampled firms. This involved reviewing secondary material, commercial materials, visiting showrooms or stores, and engaging staff in short *in situ* conversations typically used in ethnographic studies. We also took part in tours of relevant workrooms, factories, and premises which proved useful for observing cultural artefacts, being exposed to values espoused by the firm, and engaging in informal conversations with staff. The final data set was 653 A4 single-spaced pages.

Data was entered into ATLAS.ti for coding by all three authors. We used standard coding conventions, starting with open coding of transcripts and secondary data, before refining the codes into fewer

Table 2
Phases 2 and 3 informant and company details.

Case	Pseudonyms (Number of informants)	Industry	Employees	Estimated turnover (US $ million)
1 Comfy Chairs	Adam, Don (2) [a]	Office Furniture (NZ)	250	51–100
2 Swift Ships	Larry, Rick (2)	Ship Building (AUS)	220	51–100
3 Sleek Suits	Jerome, Dave (2)	Sportswear (NZ)	50	51–100
4 Green Clean	Elke, Ang (2)	FMCG (NZ)	50	0–50
5 Nature Clothing	Joanne, Edith (2)	Fashion (NZ)	150	200–300
6 Home Help	Mark, Craig, Ian (3)	Appliances (NZ)	4000	1500+
7 Lounge Co	Donna, Tony (2) [a]	Consumer Furniture (NZ)	500	100+
8 Medi-Tech	Joseph, Stephen (2)	Medical Equipment (NZ)	30	0–50
9 Dream Sleep	Jeremy, Mo (2) [a]	Consumer furniture (NZ)	120	0–50
10 Shower Co	Walter, Sarah (2)	Bathroom fittings (NZ)	400	201–500
11 Kitchen Friend	John, Aaron (2)	Crockery (NZ)	200	51–100
12 Stroller Co	Phil, James (2) [a]	Baby Equipment (NZ)	150	201–500
13 Fine Cloth	Gary, Paul (2) [a]	Wool (NZ)	50	401–500
14 Haute Cuisine	Michael, Anna, Jasper, Llewyn (4)	Food (NZ)	45	101–150
15 Spark Co	Philip, Angela (2)	Industrial Electronics (NZ)	120	0–50
16 Street Bags	Caroline, Emma (2)	Bags (AUS)	70	101–150
17 Craft Gear	Andrew, Karen (2)	Stationary (AUS)	120	101–150
18 Smoothie	Gemma, Mitch (2)	Food and Beverage (AUS)	80	101–150
19 Style Corp	Jason, Tracy (2) [a]	Fashion (AUS)	150	201–500
20 Smart Women	Jane, Edi, Pete (3)	Fashion (AUS)	120	201–300
21 Couples' Fun	Jo, Lizzy, Ang, Georgie, Myriam, Leila (6)	Personal health (UK)	200	300–400
22 Image Maker	Steve, Danny (2)	Printing technology (US)	100	1300
23 Brash Co	Nadia, Cami (2)	Luxury fashion (US)	10	20
24 Smart Suits	Craig (1)	Up-market fashion (UK)	1400	800
25 Hip Coffee	Max, Leslie, Pete, Jay (4)	Coffee and equipment (UK)	20	8
26 Music Maker	Saul (1)	Musical instruments (Japan)	53,000	4000

[a] Re-interviewed in final population checking phase.

categories and their relationships (axial coding), and then achieving theoretical saturation via selective coding (where one looks for confirming or predictably disconfirming evidence within the dataset) (Strauss and Corbin, 1998). Details, with sample passages, are provided in Table 3.

Issues of research trustworthiness were addressed through standard grounded theory criteria: credibility, transferability, dependability, confirmability, integrity, fit, understanding, generality and control (Flint et al., 2002). To achieve these outcomes, the researchers collected and analysed the data; were involved in population checking, theoretical sampling, and relating theoretical findings to informants' worldviews; jointly undertook follow-up interviews with informants to clarify *in vivo* terms; utilized grand tour questioning, dialectical tacking, triangulation, and constant comparison of theory and data; and presented initial results at four research seminars featuring design academics and practitioners.

4. Findings

4.1. Explicating the design orientation construct

Consistent with previous research we identify that design orientation is an ethos reflected in a set of emphases and behaviours that occur repeatedly across the organization (Narver and Slater, 1990; Varadarajan, 2017). We identify four core emphases of a design orientation—connective, empathetic, future, and aesthetic—that are reinforced through eight behaviours. Fig. 1 provides a visual representation of our findings, while Table 3 provides further examples of our coding and exemplar passages. Consistent with previous theory-building research on orientations, we combine data from informants and secondary sources with the relevant literature (Kohli and Jaworski, 1990; see also Strauss and Corbin, 1998). We support each section with the relevant literature and data, be it exemplar passages or observations of practice. Given space constraints, we provide further examples of selective coding in Appendices A–E. This also evidences theoretical saturation, enhancing the validity and reliability of our findings (Goffin et al., 2019).

We also coded our data for passages reflective of a design-oriented

ethos in its own right (as a form of theoretical triangulation). We identified 4 second-order codes that were grouped into direct evidence of an ethos: *design logic at the core of how the organization thinks and operates*, *design flowing through innovation processes, no superstar designer, part of the team*, and a *focus on creating value for the firm and users*. The first two of these second-order codes reflect design's strategic centrality, the third reflects the commonly held belief that design orientation is different from being led by a strong designer (a negative code that reinforces our theory), and the final one a focus on outcomes, which links design orientation to firm value creation.

Informants stressed that design orientation was not a set of tools the sole preserve of designers or the design function, nor was it a toolkit solely for boardroom decision-making (Candi, 2016; Micheli et al., 2018). For example, when asked "What does design orientation mean?" Donnie captured the general feeling in his response: "As opposed to hiring a great designer …". The passages in Appendix A all reflect the belief that design orientation means the logic of design is *embedded within and across the firm*. Terms such as "embedded," "ethos," "identity," "all-encompassing," "the thread running through the organization," and "integrated into every aspect of the business" were used by informants.

The four core emphases reflective of an ethos of design orientation (connective, empathetic, future, and aesthetic) that will be unpacked in the next section are reflected in (1) how non-designers approached problem solving, (2) the ways design-oriented firms embedded design practices in their operations, and (3) the changes undertaken by firms that had undergone a shift from being very *designer*-centric (but struggled in the marketplace) to one that aligned design with business strategy. For example, in relation to the first point, Martin, a brand marketer, describes how employing a design-based approach to interrogate problems resulted in a rewritten brief with his client:

Martin: "It [design] can be a great cultural change for a business and people who really understand it to full effect. We recently rebranded what used to be [brand name] (bedding retail). And what took us a while to work out during the process was it wasn't just about brand *per se*. They weren't just looking for a means of helping consumers recall their brand, they actually wanted cultural change. We still needed to give consumers a way to record the brand, but [really]

Table 3
Coding and supportive evidence.

Emphases/ Behaviours	Supportive passage
Connective emphasis	
Catalysing	"… we're not going to pay for someone just to do a few sketches and sit on the beach. Where it is actually what the designers want as well is a company that design is integrated, the role of the designer is understood, the designer works with everyone within the company and becomes a vital link." Dave (Expert)
Integrating	"Even right down to the accountants we hire and, obviously, the marketing teams we hire. It does have an element of understanding what design is and how they talk about it, what they see in what we do, a belief that design can offer this great benefit to the company. But it's more of a basic understanding really, and that really helps because everyone is then just talking along the same lines and they understand when I start talking about elements within design and design language and philosophies behind that, that they can actually get that and take that even further because they're going take what I say and move it to their groups as well, and to our PR agents and to our advertising groups; they need to be said, the same things, from what I've been saying as well. So if they understand that then they really absorb and they really then put a spin on it as well and that works really well." Shower Co (Walter)
Empathetic emphasis	
Perspective taking	"… gone are the days when people buy suites of furniture, so they don't buy everything matching any more. Storage requirements and single pieces of furniture have changed because a lot of people when they are building houses, renovating, moving into new apartments are putting in organization systems into wardrobes so the thing is that the requirement becomes that they want to buy featural pieces of furniture for their bedrooms so how do we, you know, picking up on those things and providing people with that as opposed to the matching suite is sort of the direction that you sort of go from there so it's just being involved with society and lifestyle and people really to sort of pick up on those sort of things." Dream Sleep (Jeremy & Mo)
Marrying logics	"… design tends to be probably a little bit more unconstrained. But the beauty of working with the scientific people from my experience is firstly the capacity to produce certain things that you can't get in normal design projects. I mean we get access to new materials, we get access to new technology that if you were just working on design projects the general designer is not actually capable of prosecuting something of that degree of complexity. Something that requires that degree of analytical thinking, because a lot of those guys, they have a very strong grip of their discipline whether it be engineering, mechanical engineering or chemistry or something like that. So it is a much more elastic, I think, discipline." Joel (Expert)
Future emphasis	
Disrupting	"… to take that big leap to your product that's really disruptive, you're not going to get from just asking the customer. Once you know your product idea, then absolutely, go and work with the customer, but to come up with a new disruptive product idea, it's very rare that you get that by just asking the customer." Spark Co (Philip & Angela)
Future-proofing	"A couple of years ago everyone was doing tulip-shaped skirts and, you know, you wouldn't see one of those here because, you know, it just so clearly dates. And one of the things that is important to us is that if the design is good enough it transcends time ….we like people to be able to go into their wardrobe and pull something out that we made in 1996 and it still looks okay. And it has to have an edge to look okay. But the edge has to be a new edge, not a major trend edge, if that makes sense". Nature Clothing (Joanne & Edith)
Aesthetic emphasis	
Design language	"… the ultimate is that people will be blindfolded, pick up our product and know it's ours … So we try and keep certain parts of that design in every product within storage. So it's single handle and then everyone says that's a Kitchen Friend product. And we change toggle designs, we change lid designs. And one of the other things we had, every product we had was stackable so it all fitted. So when we came to a new range we actually designed the footprint to be identical to the one before, even though the whole base and lids had changed so that they could actually take what they bought two or three years ago and still use it, stack on top." Kitchen Friend (John & Aaron)
Brand reinforcing	"These guys actually liked the ideas of a smaller, a single drawer. A lot of it was driven by ergonomics. They liked the idea of the two drawers being side by side rather than one on top of the other. They were just saying that is ergonomically much better. You don't have to bend over so much. So I think they were committed to the ideal and they were saying, "Okay, you can have that ideal but I also want you to be able to put them one on top of the other and replace the existing dishwasher because we will sell a lot more that way. Otherwise we are limiting our market to new kitchens or kitchen renovation jobs rather than just going and buying another appliance." Mick (Expert)

they wanted something to signal to their franchisees 'this is the new era for us, we used to be a discount brand, we're not anymore. We're a smarter outfit."

Martin's passage reflects a different approach to branding problems. Rather than simply solve the problem of poor brand recall (usually an outcome of, among other things, poorly defined brand identity), Martin engaged in two design practices (Micheli et al., 2019), namely problem interrogation and reframing, to identify a more lasting source of strategic positioning that would help the client overcome enduring competitive pressures driven by price competition. Using these tools reflects a design approach to brand challenges, with a focus on disrupting previous identities and creating something new (Beverland et al., 2015).

On the second point, we saw evidence that design's ethos was diffused throughout design-oriented firms, and indeed into the wider network of strategic partners such as suppliers and franchisees. For example, in Haute Cuisine and Fine Cloth, the development of value-added strategies required all members of complex networks to rethink practices that went back decades. As each project evolved, it became clear that an emphasis on control and ownership from the point of production (pasture) to use (plate/suit) required standards being developed for each step of way (some could involve seemingly small details that were in fact essential, such as standards for flooring in auction pens for animals so they could stand comfortably, thereby reducing stress and the potential for muscle damage).

Third, firms that had struggled to turn formal recognition through design awards into sustained business success identified the dangers of being designer-centric without embedding the logic more widely to build a more sustainable way to compete in the market. This view, articulated by Adam (Head of Design at an award-winning firm that subsequently developed into one of NZ's highest-performing medium sized enterprises), underscored the need to reduce the mythic status of the design function. For example:

> Adam (Comfy Chairs): "We would develop things up and only at our official stakeholder reviews would we show what we've done and then we'd take it away again. We'd get it almost to a fully designed product before we even handed over to our process engineers or our manufacturing plant, and then all of a sudden it was based on assumption what they could produce and what they couldn't, and then it becomes their problem. Whereas now we want these guys to be involved."

In conclusion, design orientation is an ethos that is both reflected in, and reinforced by, the organization-wide adoption (and, where relevant, extended into the organization's networks) of four emphases and subsequent behaviours (Homburg and Pflesser, 2000). The first of emphasis we have labelled "connective," and it is exemplified by the desire to integrate different functional concerns (see Adam's passage above) and integrate external stakeholders as per the examples of Haute Cuisine and Fine Cloth. The second emphasis, which we have labelled "empathetic" with its focus on seeing things from another's viewpoint, is again evident in Adam's description of the need to bring other core functions into the innovation process early on to ensure that their constraints are recognized. The third emphasis we have labelled "future focus," as exemplified by Martin's reframing of a present-day branding challenge into one
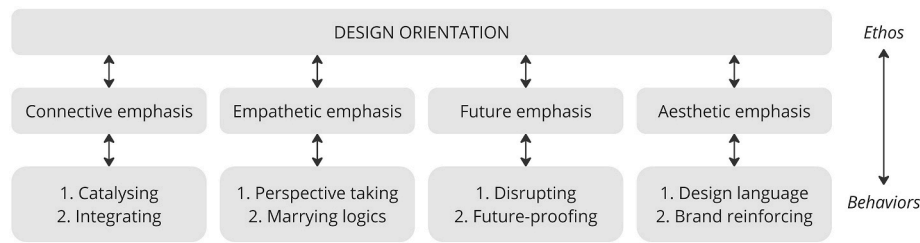
Fig. 1. Unpacking design orientation.

focused on what could be. The final emphasis we have labelled "aesthetic" to account for informants' beliefs that how something is physically represented provides a basis on which to compete. These four emphases and eight supportive behaviours that reflect and reinforce them are further unpacked below.

4.1.1. Connective emphasis

The first belief we have labelled "connective emphasis." This belief is reflected in, and reinforced by, two behaviours: *catalysing* and *integrating* (see Fig. 1). Connective emphasis reflected an organization-wide belief about how best to organize and work together. The first of these behaviours, catalysing, involved a shift in the role of design from functional concerns alone to one that brought different stakeholders together. The second, integrating, involved an emphasis on working together towards a shared goal (Larry and Rick's passage in Appendix B captures this integrating aspect of connective emphasis). Although the experts and firm-based informants stressed that design orientation meant the firm used aesthetics to compete, they emphasized how critical it was for the design function to be part of a wider team engaged in value creation. This emphasis was contrasted with what informants called a "purist" approach. This typically involved the stereotype of designers as wannabe artists disinterested in commercial success. Each function's ideas or concerns were "part of the puzzle" rather than issues to be ignored, resisted, or changed. For example:

> Walter (Shower Co): "In the early concept phase the production team really aren't interested too much because they're really wanting to know further down the track, but it's good to have them there so they can have an understanding of what the project is and over time build up a rapport with that product idea. It's really getting people there at each other's [new product development] gates and we get all those people involved early on because they get instant buy-in and provide ideas we hadn't really thought of."

To capture the behaviour of using design as catalyst for linking, we coded phrases such as "the bridge" or "the glue that binds" to capture how informants saw the relationship between design and other functions. This behaviour identifies the difference between a firm led by the design function and one that has a design orientation. In the latter, design's preference for interdisciplinarity and holism (Micheli et al., 2019) is diffused throughout the firm, with design becoming the catalyst for bringing these functions together to create what they see as better outputs. When combined with the empathetic emphasis below, particularly through the behaviour of marrying logics, design is able to ensure integration without remaking everyone over as a designer. This is important, as research has identified the dangers of achieving interfunctional coordination through reductions in psychological distance (Homburg and Pflesser, 2000), or the attempt to force each discipline to dilute their functional expertise in favour of one dominant one (such as marketing, design, or finance). This reasoning is also reflected in Adam's earlier passage from Comfy Chairs. For example:

> Craig (Smart Suits): "I have product managers, marketers, designers and salespeople and what I do is we pretty much get everyone together and say 'Here's the inspiration, here's the idea or the concept, now I wanna put legs to it,' and I'll really engage with

everyone to make them feel that they own it themselves, and I let them have time and space to go away and think about and let them come back with their thoughts and then what we do we start putting legs to it by saying 'If we went down this track with this initial concept or product, again, who is the customer, why would they buy, what's the price on it, and how are we going to market this?' Before even the product is made and we build a whole story right from the very the beginning so that people feel 'Wow, I'm not just a product manager I'm a marketer, or 'Wow, I'm not just a salesperson, I'm a designer,' and then it's amazing what comes out of that and there's some really great ideas. I think this is part of a design-led business is embracing what people say but having leadership that can channel it in the right way to the right people in their areas for them to follow the path they know we know has got enough to put legs to that whole inspiration."

To illustrate these points further, we draw on Sleek Suits, a firm that experienced a shift in orientation (as did Stroller Co, Home Help, and Comfy Chairs). At Sleek Suits, founder Dave contrasted his current operation with that of five years prior, when the firm was struggling to build a loyal customer base among professional and leading amateur athletes. Previously, the firm's dominant logic was one of technology-centricity. Their core line of products, wetsuits for triathlons, were technologically advanced in terms of streamlining, materials, and strength, but were failing with users because they had ignored the importance of comfort in extreme performance conditions. Suits would win technology awards and gain trials but not continued support among elite athletes. Dave only overcame this problem when the design team was given more prominence and working with sales, identified the core challenge through their own direct experience via a corporate team-triathlon event where staff wore Sleek Suits' and competitors' products. This insight led to a reorganization of the company where inputs from all departments were sought, initially at company-wide ideation events aimed at building a greater sense of understanding across the firm of the multiple concerns that the innovations needed to address.

In summary, connective emphasis was reflected in and reinforced by two behaviours: catalysing and integrating. These two behaviours involve practices about the best way to organize for innovation, and as a result, compete in the marketplace. While market orientation stresses interfunctional coordination and the centrality of marketing insights to the decision making of all functions (Kohli and Jaworski, 1990), in design orientation it is the practices of design, particularly the valuing of interdisciplinarity and addressing holistic concerns (Micheli et al., 2019) that define the core organizing process. In this sense, design-oriented firms treat each function as equal (see James' passage from Stroller Co in Appendix B as another example). The innovation process was therefore defined by briefs that addressed the concerns and needs of each function, resulting in a broader set of considerations for innovation projects and also greater engagement internally with design.

4.1.2. Empathetic emphasis

We define empathetic emphasis as an organization-wide recognition of the value of taking a stakeholder's perspective and the context that frames it. For example:

Mick: "I think the number one characteristic that designers must have is empathy. Design-led growth requires designers to understand who the market is and where they have been and instinctively know where to go next. But we are talking about design-led. We are not talking about wanky little designers on the sideline doing their own thing and wondering why the rest of the world is taking no notice. And that requires designers to engage their humanity and understanding of where people are."

We focus on "stakeholders" because empathy extended to both internal and external users, rather than privileging customers. An empathetic emphasis was reflected in and reinforced by two behaviours: *perspective taking* and *marrying logics*. This emphasis also interrelates with the connective emphasis, as the behaviours here provide the basis for catalysing and integrating. However, design-oriented firms go one step further, stressing that competing comes from a deep understanding of what were commonly labelled stakeholders' "true" or "real" needs (as opposed to those they may espouse), the context that frames those needs or concerns, and the ability to combine these with different perspectives to align the NPD process with users, often resulting in disruptive competitive outcomes.

The first behaviour, perspective taking, was used both externally and internally. Externally, it involved an emphasis on understanding problems rather than focusing immediately on solutions (see Martin's passage in section 4.1). This was often reflected in comments such as "people don't often know their problems" or a rejection of voice of the customer analysis (i.e., formal research that asks customers about their needs) during the early stage of the innovation process. Internally this involved understanding each function's different demands, pressures, and preferred practices to pitch ideas in ways that would be seen as legitimate (and therefore supported the behaviours unpacked under "connective emphasis"). Joseph's passage below illustrates this.

Joseph (Medi-Tech): "The whole point there is you're observing what they [surgeons] do and see what's problematic, what's not working and so you're getting less verbal information, which is often where you're not going to really get someone like a surgeon who has just trained for so long, it's hard to figure out but when you're observing it you can see and say 'Okay, this this is where the bottle necks are.'"

At Medi-Tech, engineers and designers spend significant amounts of time in operating theatres, observing as Joseph describes, the practices (and the processes that frame them) of surgical teams, identifying patterns of behaviour and areas for improvement (see Steven in Appendix C). The combination of engineering and design enables the fast development of prototypes that address functional and ergonomic needs (Adam in Appendix C used the same practice to encourage greater internal buy-in).

As with all the firms sampled, ethnographic observation rich in context was drawn on to uncover the reality of user experience (Cayla and Arnould, 2013), and latent needs, which are difficult to access directly due to their tacit nature. For example:

Adam (Comfy Chairs): "Fundamentally you're looking for latent needs. If you're asking what they like or dislike about their working environment, they will often tell you what they think they need, as opposed to what the problems really are, because we're about really understanding what the problems are and seeing whether there's an opportunity to tackle it in a different way. And so, by digging deeper, fundamentally they'll give you a comment about something that disappoints them or delights them, and you ask them why and they'll tell you, and you ask them why again and they'll tell you."

In exploring individual NPD projects, similar practices were identified across the sampled firms (see passages from Stroller Co and Comfy Chairs in Appendix C). The marketing team at Shower Co found that traditional insight methods about showering failed to uncover the user experience. As a result, they, along with the design team, observed fellow staff members' showering rituals in the home, identifying the emotional nature of the experience (good and bad), and how the lack of attention to the range of things people did during showering (e.g., shaving one's legs) frustrated users. The focus on context also meant Sarah (Appendix C) and her team identified how a lack of storage within a shower was compensated for by user practices within the bathroom.

This empathetic emphasis was also extended to the internal realm as part of activating the connective emphasis identified above. As we have noted, these empathetic practices were also turned inward, with staff encouraged to see things from another's point of view, an organization-wide practice that provided the basis for interfunctional sensemaking (Beverland et al., 2016). One commonly offered example was the difficulty many firms expressed with the sales function. Informants noted that sales often raised the most objections to future-oriented designs, however they were also cognizant that managing for the short term and being aware of what was in market were important considerations. Passages, such as those by Jerome, James and Aaron (Appendix B) and Joel (Appendix C), indicate pushback from sales but also identify why, noting that this function is in the frontline and dealing with objections or requests from B2B purchasers, retail partners, agents and end users. The following passage, from Spark Co, a producer of industrial electrical systems, describes this emphasis on empathy with internal stakeholders:

Angela (Spark Co): "I've always had a little bit of a problem with the internal customer because let's face it, people who work here, they're not customers. We've got a much stronger relationship than that but when I have to write a procedure about how we do something, actually I should go to those people who are going to use it, look at how they do their day-to-day work and try and fit my procedure around them, not what I want to do. And I'm starting to see more and more people around the company actually doing that—going out and internally treating people as a user of what they're doing."

The second behaviour, marrying logics, flowed from the first and involved not only combining different needs (as with the shower example above) but also enabling the linking together of different functional groups and network partners to create new sources of value. Informants such as James and Mark (Appendix C) described how the use of design tools such as reframing was commonly deployed to create buy-in and understanding. Examples included marketers creating personas and storyboards to enable designers to understand segmentation and lifestyle data; designers adding "what if" questions into focus group discussions to provide marketers with the necessary validation to push for riskier, future-focused solutions, and designers shadowing chefs and wait staff in restaurants to gain insights into packaging and menu design. The outcomes of this often resulted in solutions that seemed paradoxical, such as Dream Sleep's line of classically modern beds, but enabled them to balance commitments to an aesthetic identity while also addressing the needs of different internal and external users.

In summary, empathetic emphasis was reflected in and reinforced by two behaviours: perspective taking and marrying logics. Together these behaviours worked in harmony with those in the other emphases, particularly connectiveness. While perspective taking may seem similar to the customer focus of market orientation, the preference for tools such ethnographic insights reflected a desire to focus on more disruptive solutions (see section 4.1.3 below) and also uncover latent, as opposed to espoused needs (Slater and Narver, 1998). Furthermore, while market orientation emphasizes interfunctional coordination, perspective taking and marrying logics (a) activate the collective meaning making essential for functions to work together and (b) results in products that enhance competitive distinctiveness by focusing on latent needs.

4.1.3. Future emphasis

A firm's implicit temporal orientation has been demonstrated to be reflective of a deeper cultural ethos (Schein, 1990). In relation to design orientation, the language and tools used and the strategic outlook of the informants supported the belief that an emphasis on the future was central to sustained value creation and competitive advantage (see for example, passages from Edith, Philip, and Larry in Appendix D). This future emphasis is reflected in and reinforced by two behaviours: *disrupting* and *future-proofing*. In essence, design-oriented firms engaged in practices that (a) emphasized "what if" scenarios, (b) extrapolated likely futures from trend data to inform innovation projects, and (c) sought greater control over markets in which they competed, often by trying to reshape them.

Common across the informants was an emphasis on challenging product category conventions, or creating new product categories and building barriers to entry as ways of disrupting the existing market order. In both instances a capacity to imagine plausible futures was critical. For the firms sampled, this was also often a competitive necessity, as imitation was unsustainable given their exposure to low-cost international competitors. Phil's passage describes his firm's strategizing in the crowded infant stroller market. Building on the practices gained through an emphasis on empathy, Phil is focused on creating a new category that disrupts the category's traditional view of motherhood as distinct activity removed from other aspects of the consumer's life (i.e., perspective taking). For example:

Phil (Stroller Co): "What is the simplest way to appropriate a market? We think the simplest way is to create it. We focus not so much on new products as creating whole new categories, so the inline buggy was a category we created and we've since fleshed out, in part, [to] keep competitors out of that space. We think a lot of creating category first rather than going to the market and saying, 'What looks good out there, let's try and create something that's similar to that but somehow better or different.'"

Disrupting category conventions through reframing products around users is central to design practice (Beverland et al., 2015; Micheli et al., 2019) and builds on the empathetic and connective emphases discussed earlier. This disruptive focus led to a preference for radical innovation (later followed by incremental updates and additions), that were also future-proofed. For example:

Ian (Home Help): "We have existing platforms that we need to continue to keep competitive, and they tend to generate most of today's income, so they're very important to us, but as well as that we're looking to invent the future and develop the future revenue streams. So that's all about the kind of the far-reaching stuff or the innovative stuff or the radically new or whatever, and just stuff that the market hasn't really seen before."

Future-proofing was in part driven by the behaviours covered earlier (perspective taking) which enabled teams in NPD projects to work back from plausible futures to produce radically new products in the present. For example, when seeking to develop the core concept for the next generation of office systems, the team at Comfy Chairs worked with industry experts and scientists at the local university to identify likely future trends in work practices. This process future-proofed the firm's new line of products as they were launched just as office work shifted away from productivity to creativity. For example:

Adam & Don (Comfy Chairs): "Our internal design driver was called Mindspace—environments that work the way your mind works. We've always designed furniture to match the way that your body works. But future thinking is so important to our way of working and one thing we've had to do is understand how the workplace is changing. What are the business models that companies are embracing to try and create competitive advantage? And a lot of that is based around this whole sense of innovation and ideas economy.

And so, we say, 'If thinking is so important to your work, why shouldn't furniture also match that your mind works?'"

The approach used by Don and Adam above was typical of how design-oriented firms framed questions of competitive advantage and positioning. A similar process of macro-environmental analysis drove a shift in emphasis at Swift Ships, away from their traditional advantage around speed to one of economy (as fuel prices began to rise across the globe). This led Swift Ships to urge all staff to consider future processes or actions that could reduce the weight of ships, reduce the cost of refurbishing, use exposed ship surfaces to generate wind power, and reframe the firm's historic emphasis on speed when fuel cost increases threatened to undermine their advantage.

Larry (Swift Ships): "The aircraft industry is going to lighter materials, carbon fibre, lightweight materials in the cabins, microfibers …. As I say weight is part of our culture and we do that in everything, no matter whether it's seating fabric or any of the structural things. Where we paint a boat or not paint a boat, whether we paint vehicle decks as against sandblasting it. We can save about seven tonnes of paint by not painting it, only sandblasting it. So it's all that weight you don't carry around for the life of the ship, which burns fuel."

Finally, future-proofing drew on design's emphasis on experimentation and iteration (Micheli et al., 2019) with a focus on getting product to market quickly, and then shifting attention to updates, improvements and adaptations that added value. The outcome of this process was to (1) create a leadership position in a reframed or new category, (2) continue to build brand image through sustained improvements, and (3), generate revenues through quick to market launches. Passages supporting this are provided in Appendix D (see for example, Sarah and James from Shower and Stroller Co, respectively).

In summary, design-oriented firms were characterized by an emphasis on the future, reflected in and reinforced by two behaviours: disrupting and future-proofing. This focus on the future reflects design's preference for an abductive, or "what if," logic (Micheli et al., 2019) and sits in contrast to market orientation's emphasis on adaptation to customer needs and competitor actions in the present, through incremental innovation (Slater and Narver 1998). A future focus worked in harmony with connective and empathetic emphases as the behaviours across all three reinforced one another by connecting the user, internal operations and competitive positioning. The final emphasis, aesthetic, was a physical representation or output of the other three.

4.1.4. Aesthetic emphasis

Although informants were keen to emphasize that design orientation was very different to design being treated as an afterthought or what was emically referred to as the "styling department" (akin to what Micheli et al. (2018) identify as "design as service"), they also returned to the power of aesthetics as a means to compete. For example, Donnie saw a core part of design orientation as "where the whole culture sees the idea of aesthetics being the way in which they can develop greater margins." Therefore, the fourth emphasis of design orientation concerned the value of aesthetics, which featured in the previous definition of design orientation (Venkatesh et al., 2012), as a means of competing. This emphasis was reflected in and reinforced by two behaviours: development of a unique *design language* and connecting brand identity to objects as a means of *brand reinforcing*. Jerome's passage below captures both these behaviours:

Jerome (Sleek Suits): "As a brand Narwhal [pseudonym] is a whale, it's in the water, it's grey, and we want to get into swimming for example we would want to make a swimsuit that has that the look and feel of being a brand that is associated with water. We need to think about the type of fit it is for the customer, and then we look at ways that we can bring print into the fabric so that it's pleasing on the eye, it's minimal in the way it's designed yet striking because our brand is the Narwhal and the whale is very striking and minimal in a

way so we don't want it cluttered with a whole lot of circles or squares that are just all over the garment, we want it to appear in areas within lines that work within the body and the shape of the body to bring a look that's clean and yet you wouldn't have to put Narwhal on it to know it's still Narwhal."

A distinctive design language has been identified as a means by which firms leverage aesthetics strategically (Dell'Era and Verganti, 2007; Simoni et al., 2014). We identified how design-oriented firms emphasized (1) the importance of aesthetic expression as a competitive point of differentiation and (2) the need to use that unique aesthetic expression across all products to build a recognisable design language that the firm could "own" (i.e., that could be identified by all stakeholders as representative of the firm's identity). Even in sectors such as high fashion, aesthetics was viewed not as "art for art's sake" (a common refrain in the interviews) but as how the firm physically manifested itself in the marketplace through product form, tone of voice, storytelling and touchpoints with customers such as special events. See for example Nadia's (Brash Co) passage in Appendix E identifying the need for everything to cohere together, for the brand's identity.

Informants from a range of sectors, including cost-driven business-to-business categories such as freight (Swift Ships), surgical instruments (Medi-Tech), industrial electronics (Spark Co), agricultural ingredients (Haute Cuisine), through to consumer-focussed firms, all stressed the value of competing through an identifiable design language. Returning to Nadia's passage in Appendix E, a review of the nu-luxury fashion label's first decade of designs reveals an enduring commitment to a singular design language, one that mixes "outlandish" feminist statements of sexuality and power with a rock and roll ethos. The team at Haute Cuisine built up an extensive program for direct customers (chefs) and end-consumers that was unique in the sector, with packaging that tied together high-end and lower-value cuts of meat, and preparation instructions, menu guides, and sponsored wait staff uniforms and equipment that were consistent in tone and aesthetics.

For Home Help, the development of a distinctive design language was part of its commercial revival. Faced with lower-cost competitors from abroad, the CEO had made it clear that the next wave of innovations truly had to represent a new era for the firm (otherwise the local manufacturing would be shut down). As design historian Mick stated, the resulting breakthrough product lines not only delivered functionally, but represented a physical embodiment of the firm's new strategic intent to move into upper price points with distinctive products that leveraged the firm's history of engineering innovation. Mick, and the informants from Home Help, state this emphasis on a unique design language that was the missing piece of the puzzle for Home Help.

> Mick: "I think the crucial point about the [product name] is that it shifted the whole perception of who Home Help is and what it has to offer in the international market. They have always been committed to research and development. They have always been innovative. They have done lots and lots of things that they have patented but most of it is buried in the workings of it and it is not externally apparent."

Mick went on to discuss how the successful launch of the Home Help's iconic line initiated a revolution at the firm whereby all products were rethought in terms of their visual expression, with small aesthetic changes in gas top stoves, washing machines and other products that communicate the firm's engineering prowess to users and staff. Sarah from Shower Co and Joseph from Medi-Tech (Appendix E) report a similar transformation using a design language. For these firms, an aesthetic orientation also signalled their global intent as upmarket design-conscious manufacturers, with Sarah from Shower Co stating, "We see it developing into an upgrade of our brand to become global, into a brand about what we are and who we are as a company."

Sarah's quote leads us to the second behaviour reflective of an aesthetic emphasis—reinforcing the brand through objects that reflected the brand's identity. For the largest firm in our sample, Music Maker, the brand's historic aesthetic approach to instrument design provided the basis for a brand revitalization program in which engineering excellence was enhanced with a more emotional feel, resulting in a substantial uplift in the brand's financial brand equity (as measured by Interbrand). A once very siloed organization, consisting of genre-based fiefdoms each with its own unique marketing identity that resulted in a confusing use of design language such as logos, font, and colours, brand manager Saul decided to create a shared corporate identity that would enhance the firm's competitive positioning. This is captured in Saul's description of the logic behind the firm's radical redesign of an electric violin that reduced the use of materials through clever use of negative space, enabling greater visibility of the artist to the audience:

> Saul (Music Maker); "Design is for us a key part of the brand. For example, when you look at the violin shape, normally there is functional elements but there is a general philosophy to say, 'Always keep the player in front,' and not the super extravagant instrument. If you see this violin, it just had this very thin shape acoustic violin, and this is also a symbiosis, we still want this perfect acoustic sound, even in a digital instrument, but we come from a design perspective, with its reference to an acoustic violin, but overall we don't want to over pronounce anything, so again, the player is the central piece and we keep it to the aspect of 'What does it *really* need?'"

In summary, design-oriented firms perhaps unsurprisingly emphasize the values of aesthetics as a means to compete, as central to their marketplace identity, and as something worthy of investment and strategic focus. However, design-oriented firms did not treat aesthetics as a form of styling, to be completed at the end of the NPD process (Micheli et al., 2018), but instead as a form of identity, that when reinforced over time through numerous product releases (with supportive marketing investments) came to represent the organization's brand identity and form of competitive differentiation. Whereas market orientation is largely silent on the role of the brand and symbolic assets involving aesthetic considerations, design orientation places great emphasis on these tools as ways to engage staff internally, communicate externally, and provide value to users.

5. Discussion

5.1. Implications for theory

This paper extends our understanding of strategic design and design orientation. Responding to calls to clarify the "what" of design orientation (Beverland et al., 2017; Noble, 2011), we identify four emphases and eight behaviours reflective of a design ethos being embedded across the organization. Drawing on these we address our core question and define design orientation as "the organization-wide emphasis on connectivity, empathy, future focus and aesthetics to create value for users through innovative solutions that in turn address the firm's competitive and identity needs." This definition meets Varadarajan's (2017) standards for an orientation. First, it identifies that the firm is predisposed towards an ethos, and then draws on this to identify preferences or emphases that are reflected in and reinforced through behaviours. Second, throughout the passages it is evident that this orientation is the means by which the firm seeks to organize to address challenges of resource acquisition. That is, we demonstrate that the behaviours reflective of a design-oriented ethos frame decision making, investment choices and strategic preferences of organizational actors, including those outside of the design function (Hunt, 2012). In meeting the requirements of an orientation, we encompass previous work on strategic design (Micheli et al., 2018) and design-led cultures (Beverland and Farrelly, 2007) into a broader construct.

This definition also extends existing approaches. First, it fleshes out the idea of design as dominant perspective (Micheli et al., 2018) by identifying the cultural assumptions that reflect and are reinforced by

design-oriented behaviours. Second, it expands conceptualizations of design orientation beyond subjective assessments of design prominence or investment (Gemser et al., 2011; Hart et al., 1989), innovation or NPD processes (Hatchuel et al., 2006; Moll et al., 2007), or an emphasis on "artful making" (Venkatesh et al., 2012). Finally, in using the term "orientation" we provide a construct that has face validity with practitioners of design and other employees within design-oriented firms.

Our second contribution relates to debates about leveraging designers' distinct tools and problem-solving practices, or design thinking. Debates within design thinking often come down to arguments about whether non-designers can engage in design thinking, or if the thinking can be divorced from design practice (Micheli et al., 2019). We demonstrate that non-designers can embody an ethos of design, even though this means adapting the tools and practices to their own functional specialty. Informant passages, observations, and secondary documents identified how non-designers engaged empathetically with counterparts in design and other functions to collectively solve problems, refine ideas, and create value. Furthermore, a preference for radical innovation that addressed latent needs were evident in the campaigns planned around new product launch and also in the types of research tools used by marketers (such as ethnographic research). Aligning brand assets such as logos and colours with a design language was another example. These practices are reflective of the attributes and tools of design thinking identified in the exhaustive review undertaken by Micheli et al. (2019). Rather than trying to reduce psychological distance between functions by making everyone a "part-time designer," implementing design thinking throughout an organization requires embracing the four emphases and the eight behaviours that they represent in discipline-specific ways (Beverland et al., 2016).

Our fourth contribution involves consideration of design capabilities. In his call for clarification of design orientation, Noble (2011) asks whether it is a capability, and if not, how orientations and capabilities interact. Rooted in the resource-based view of the firm, capabilities tie together a firm's assets and enable them to be implemented (Day, 2011). Since capabilities are tacit, embedded in organizational routines, and involve learning, they are difficult to copy, thereby providing firms with competitive advantages (Day, 2011). Orientations on the other hand provide the setting for such capabilities to emerge and be deployed (Morgan et al., 2009). We believe our findings support this view. Orientations consist of emphases and reinforcing behaviours that act as enablers for capabilities; in contrast, capabilities are more specific, and often involve unique combinations of resources (in our case, brand attributes, design language, ability to adapt, disruption, and so on). Future research could further the work on the nature of design capabilities (started in Swan et al., 2005) by examining how capabilities may interact positively with design orientation to create and reinforce culture.

5.2. Implications for practice

Our findings have implications for managers. For design orientation to permeate the firm, design in the broadest sense needs to gain internal legitimacy. Micheli et al. (2018) identify ways in which this occurred, including through sustained investments and closer ties between the CEO and design leadership, widespread awareness within the firm of what design is and does, emphasis on cross-functional teams for all key projects, and adjustments to existing measures of success. These top-down approaches are useful but need to be complemented with bottom-up strategies. We suggest that one start with diffusing the eight design-oriented behaviours to enable non-designers to use them in their day-to-day roles to achieve successful outcomes. This more ground-up approach may ensure increased internal legitimacy for design to improve ways of working together to create value.

Implementing and sustaining design orientation will also require the development of a supportive organizational climate. Design thinking for example is characterised by a high tolerance for risk and preference for

experimentation (Micheli et al., 2019). One commonly noted expression of this is the tolerance of failure (Beverland and Farrelly, 2007). This can only emerge and be sustained with a climate that embraces innovativeness and creativity, hence the critical importance of reinforcing associated beliefs across the firm. Furthermore, sustaining associated behaviours will require aligning organization structures and processes to ensure reward systems do not undermine design orientation, discourage extended ideation, and encourage incremental solutions. Finally, it requires supportive leadership, committed to owning unique aesthetic market assets and open to a diversity of perspectives (Candi and Saemundsson, 2008).

5.3. Limitations and future research

One aim of this paper was to identify an agenda for future research into the nature, outcomes, and challenges of design orientation. Given the qualitative nature of our inquiry, we are aware that the first challenge will involve empirical measurement and validation across a larger sample. Furthermore, although senior leaders are recognized as cultural carriers in the literature (Schein, 1990), validating these behaviours across a wider sample of employees is also an essential research task to support our proposition that design orientation is an ethos embedded throughout the firm. The development of a robust measure of design orientation would assist in overcoming these two limitations.

Following the development of a design orientation scale, links between design orientation and performance, and in particular, the specific contributions of design orientation to organizational outcomes, could be examined. For example, the literature suggests that design orientation should lead to advantages at the firm level and in terms of NPD (Luchs et al., 2016). These include enhanced collaborations in NPD, superior NPD outcomes, and greater likelihood of adoption (Veryzer and Borja de Mozota, 2005). Given the emphasis on disruptive innovation by our informants, we suggest an examination of the relationship between design orientation and more risky explorative innovations could be worthwhile. Throughout our passages, informants also made reference to desired outcomes, both in terms of NPD (outcomes and processes) and strategy. We propose that future studies could examine the impact of design orientation on the strength of the consumer–brand relationship (and through that, brand equity), user engagement, and user advocacy. At the firm level, design orientation could enhance competitive differentiation and advantage, and contribute to decreased selling costs, enhanced margins, and increased profitability.

Extending on the above, future research could unpack antecedents of design orientation and the moderators of the design orientation–performance relationship(s) through a similar approach to that deployed by Kok and Biemans (2009) to examine market orientation. Informants made reference to the importance of a number of attributes that could be considered antecedents: leadership, climate, reward systems and HR practices, and resource investments. Although some of these are common to other orientations, the exact nature of these is likely to differ. Research could also unpack some of the boundary conditions of design orientation. Although we developed a broad, theoretically informed sample, the competitive challenges faced by firms in Australia and New Zealand (relatively small size, difficulties for scale advantages, highly open economies to external trade) led our informants to embrace design orientation as a means of fighting against low-cost generalists from overseas. Therefore examining the impact of strategic type (generalists vs. specialist) on the value of design orientation would be a useful future research focus.

Research could also examine the interactions between different orientations. How do design orientation and market orientation interact (including proactive market orientation; Baker and Sinkula (2007))? Can orientations co-exist, and if so, what capabilities are needed for this to occur? Ambidexterity may be a useful lens in this regard. For example, while our informants showed a strategic preference for disruptive innovations that created or shaped markets, they also recognized the value

of follow-up exploitative innovations through upgrades and line extensions. These types of innovations reinforce an organization's design language (in terms of reach and scope) but also typically flow from a market orientation as they respond to espoused needs and competitor offers. Therefore, do orientations exist as compliments, or does one subsume another? Many of the firms studied for example recounted how their performance became more sustainable once they combined product-driven design skills with a more strategic approach to design that flowed across all the firms' activities. Similar questions could be asked in relation to other orientations such as entrepreneurial orientation with its focus on exploration and opportunity identification and process orientations which relate to operational issues in the context of new product development.

Finally, research could also examine issues of implementation, including the nature of design-oriented culture change and barriers to design orientation. Examinations of implementation could involve comparative longitudinal case studies of failed/successful implementation (Gebhardt et al., 2006) deploying ethnographic methods or depth interviews. Drawing on the discussion in the previous paragraph about relations between different orientations, research could examine how firms can switch from one to the other to address strategic shifts into higher-value niches. This leads to questions regarding capabilities underpinning both design orientation but also for managing multiple orientations. Finally, drawing parallels with market orientation, the role of the design department in design-oriented firms is a topic worthy of investigation.[1]

Data availability

Data will be made available on request.

Appendix A. Organization-wide ethos

Sleek Suits (Jerome)	Sleek Suits is a design-led business but it's not about a logo on a t-shirt, it's about with the t-shirt the idea we export through the fabric, the fit, the performance, the whole way of making that garment and how that garment performs on the athlete in most cases or if it's not for the athlete how the customer sees that t-shirt that has some unique fabric components to it whether it might be organic cotton, or it might be have something that is a point of difference that provides a story that can allow us to design the product with that story in mind. Therefore design for me has got everything from deciding on who your customer is and deciding on how you want to appeal to that customer and thinking it all the way through from the very start of the product which is the research stage …. to make a great product you need to work in a team to make sure that product from the bottom up has everyone's input, has overall direction from the creative person, that fits in with the brand identity, that appeals to that customer that commercially can sell, and that passion can get diluted very quickly when you've got boundaries that they have to work within and with a team that has to make sure than in the end can get into stores and sell.
Stroller Co (Phil)	We don't really think of ourselves as design-led. That's probably not an ideal way to start, from your perspective, but let me explain what we mean by that. We think of design and in fact marketing as being just core parts of what we do, they're core parts of the business and yes design is an essential part of what we do, obviously, as is marketing, but we don't think that either of those disciplines are worth much without the added focus, the discipline of commercial reality. So we like the notion that the icy winds of commercial reality whistle round the nether regions of the designers and that because it actually galvanises their focus on what is it that they're doing, and it's not just about designing something beautiful that might take 5, 10, 20 years to get right, it's actually about getting a fair bit of product to the market tomorrow, as soon as possible because, you know, why not.
Shower Co (Walter)	Even right down to the accountants we hire and, obviously, the marketing teams we hire. It does have an element of understanding what design is and how they talk about it, what they see in what we do, a belief that design can offer this great benefit to the company. But it's more of a basic understanding really, and that really helps because everyone is then just talking along the same lines and they understand when I start talking about elements within design and design language and philosophies behind that, that they can actually get that and take that even further because they're going take what I say and move it to their groups as well, and to our PR agents and to our advertising groups; they need to be said, the same things, from what I've been saying as well. So if they understand that then they really absorb and they really then put a spin on it as well and that works really well.
Jackie	To me it would mean that design is integrated in every aspect of the business, not just in terms of product design, but design thinking that goes right through and is understood by everybody within the company. I think that's one of the big things with design-led. One of the big sticking points is that it might be in the boardroom or it might be in the design office, it might be when we design their company but it doesn't trickle down and therefore it hasn't really got the possibility of being design-led or design-centric.
Donnie	There are people who have great logos and marvellous graphics etc., so they might have got the cosmetics right but for me to be a design-led firm, it means that you have got to have a design-led culture in the firm, and design-led cultures for me are rare and we all know the case models around the world, whether it's Vitra Furniture or Ikea or whatever, there's tonnes of examples internationally. And the struggle here in New Zealand is to find companies that have an understanding of how to create that ethos inside their own company. That's right across all parts of the company. I'm talking about the accounting department, or whatever else.
Home Help (Ian)	It's sort of everywhere. It's right through there and I'd like to believe it's right through the organization to a lesser or greater extent. It's not something that sits out here and advisers get involved at some stage at the process or you know, you bring them in to fix something. It's much more … okay, like from the very beginning of the insight into the idea about a product, or the generation of a new brand, or the development of brand or any sort of opportunity for change or whatever. You know, you've got to have design contribute to that process, so it's at the beginning right through to the end, and it's at various levels. Right from strategy, right through to implementation. It's sort of in there.
Spark Co (Angela)	This morning we were having a discussion to do with something that a customer asked us … nothing to do with product. It's about how they stock the product in their warehouse and a problem they've got, so they were suggesting something that we should do from just a straight business point of view. But for us, our thinking turned around and says "No, we actually should go to them and try and find out the details of their problem and work out a real solution," so that shows how that design thinking is not just end product it's actually moved to all our business processes as well, which is fantastic.

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[1] The authors thank in reviewers 1,4 and 5 in particular for many of these insights for future research.

Appendix B. Connective emphasis

Swift Ships (Larry & Rick)	*[I: So with, say, one of those problems that you're working out Rick how many people would be involved, which people would be involved in terms of solving those problems?]* Larry: There'd be an engineer or two depending how big it is and a couple of draftsmen, plus we usually get the yard involved, the welders to make sure it can be built or make sure we can solve the problem and make sure they can still fabricate it. We machine a lot of parts to reduce fatigue, so we can talk to the machine shop as well. *[I: So they're brought in right early in the process.]* Rick: Yeah plus also if it's machinery then the machinery suppliers will be involved as well in terms of determining loads. Larry: I think that's one of the keys with this business, unlike other pure design houses in the marine industry, that sit remote, sit in an office in a city somewhere and designing boats, our design gets built right out the back here, the interaction while Rick is doing his design, he's talking to the senior welding and fabricating guys just saying "Hey guys what do you think?" and "Can you build this?" And "Hey look that bit's really difficult, can you just change it?" So our design is being modified from a very early point. And every drawing that goes out gets reviewed by probably a dozen people out there. So you're getting this contact feedback, through the quality system we get these forms coming back saying the drawing is incorrect by so and so, we have to use this material or we have to change the technique, we have to do something. So that feedback goes through, which improves our design all the time.
Comfy Chairs (Don)	We're about the working environment. We used to say that we design and build high performance seating and chairs, but it's really beyond that now. Our thinking really lies in working environments. What conditions contribute to us? I guess in question I like to have for productivity or performance or innovation to occur within the workplace, and so when we talk about design, we just don't talk about product, but it's about the research and what goes on behind it. Sure we need to support that with products which are desirable without people understanding the story behind it.
Stroller Co (James)	That process is designed to make the designer constantly focus on those things that the sales team and, who are in the market the whole time, and the marketing guys, several of whom are in the market a lot, as our most important from a market perspective. And that's a little different I think from the sale guys saying "Oh, you have to do this," and then the design guys going off and doing that regardless of how grumpy they might feel about doing that. It's a more collaborative process but it's ultimately focused on commercialising the product as best we can.
Shower Co (Sarah)	It really gees up the whole company, having designers involved with marketing and involved with production; everyone starts "Oh, that's really cool!" and everyone loves that design facility or being involved with that and being involved with the creation so it really conjures up thoughts of being part of an exciting development.
Comfy Chairs (Don)	One other thing that I guess we do, and which we're getting better at but we're not great at, is having a far better cross-functional representation. Our incentives in the past, our design projects, our strategic projects have been driven just by design and then handing over all that information to the other business units and functions. They need to be aware and be not only stakeholders but also do their part in terms of preparing this product for the market.
Kitchen Friend (Aaron)	It's up to everyone who is involved to be part of what we're doing. So we get pushed by our sales and marketing people continually—"What's new Aaron, what are we going to do?" It's annoying that had lot of the stuff they get here in New Zealand, it's on its way to the States first. In the US the team in the US are quite different because they've got some big, big accounts and that's why I personally deal with them. I'm up there quite a bit because we're now moving outside of that consumer area now. We're now talking to the corporate that are driving us to say we want something a lot better than what everybody else has got. You know, you're never satisfied. So as I said at the beginning, marketing is an integral part of everything we do and design is an integral part of everything we do as well.
Home Help (Mark & Craig)	Mark: Let's look at the dryer console change? Craig: We had this very old and mature product. We had an opportunity to assemble it in a different way with a couple of different components that actually took quite a lot of cost out for us. In doing that, because we were going to have to retool some cosmetic components it says, "Right. Opportunity here to present this product to the market a little differently than we have been." So go to the design guys and say, "Right guys. You know what the brand objectives are. You know the brand family. You know all the values of the brand. Here's the basic geometry that we're now working with for these cosmetic components. Go and have a crack at it." Now they go away and they potter around and sketch and model make and come back and then put it in front of the lead sort of marketing people for that area and say, "What do you think?" And they'll say, "Yeah. Works for me." They're the first sort of filter I suppose. Quite a coarse filter. And then they go out and start selling it to the markets and deal with objections, deal with refinements that might need to be made, and the whole thing's a consultative ongoing process until we get to a point, everybody's ready to sign off. Mark: And all throughout the process obviously the engineering guys are involved and directing in the same way in terms of the technical issues around that, to make sure that you've got a good design, a fresher design, cost effective. Craig: They're looking at it. Just checking the tool design requirements and all that sort of technical stuff to be able to make that part. So that's all happening in parallel.
Smart Suits (Craig)	A store opening for example, we will pick personnel from let's say different experience levels and then have to work together not just within their own discipline but across disciplines as well and they have to respond to the brief collectively, how they do that is entirely up to them but they have to decide upon that themselves, and one of the beauty is the founder and CEO is very much involved day to day and will just pick people at random to tell them about those projects and they will be, more often than not, the least senior people who have to become spokespeople for the group so they all have to be absolutely running at the same speed and be completely up to speed with what's happening so a level of articulation at that junior level is important, confidence to be able to discuss and describe and divulge design details and project details to the creative team and things around that is important.
Dream Sleep (Mo)	What we've got here is an internal design team so we've got three of us that are on the product design team, we have a graphic designer and we have an internal marketing team and obviously a sales team so the conversations are going on across that all the time. We also have distribution so those predominant distribution that we have are chain stores that have head office and within each of those head offices they do have product category managers so some of the biggest things for us too is that needing to have that support from the market place and actually take them on the journey and stuff with us. Because having that support means that we can get our products endorsed so we can get it onto shop floors and experience has told us that you'll sell a lot more product if it's displayed on a shop floor than you do out of a catalogue so the conversations are starting to happen at that high level and actually taking them on that journey so that the idea being when we release something we still want to release a product that they still go wow but it's not a product that they don't understand. It's a product that they get, they know the reasoning and things behind it, and we incorporate that through the process but also in the way that we're launching that to the market.

Appendix C. Empathetic emphasis

Shower Co (Sarah)	Obviously we're doing a lot of shower development and tapware development so we're talking about the shower screens, "What do you feel under the shower?" "What are the senses you're encroaching on?" And things like touch and smell and feel and sound. Showering is a big part of your day and everyone's always had flats and there's always been really bad showers that dribble on top of your head and you think "God, I can't wait to get out of this thing" or "I don't even want to go in the shower," that sort of thing, so it's really creating an experience there, and it is enhancing your day.
Comfy Chairs (Adam)	Our living land philosophy in terms of everything that we design or come up with any idea, we encourage everybody to get out of the workshop and knock together in the fastest way possible, and sit someone else at it or experience with it and just observe, ask questions, experience it ourselves, because there's nothing like adding sense of scale and experience with an idea to throw it and them, and they'll reject it very quickly or embrace it. There must be something in this. So we will literally put together hundreds and hundreds of prototypes. So prototyping, we've got the living there basically.
Medi-Tech (Steven)	We're often in theatre, we've got to be in theatre helping the surgeon because he says "I need to this, I need to do this sort of operation so what I think you should do is have a something with this sort of bend on it". And the engineer sort of looks at it and says "Well I know what you want to do but that's not

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	the way to do it. Perhaps if you had it like this …" and [the surgeon says] "Of course, right." So the surgeon, he knows where he wants to get to but he doesn't quite know what it takes to get there and that's what we do.
Sleek Suits (Dave & Jerome)	Dave: I will wear my competitors' products and I'll always wear our products particularly in the early stages to test fabric, sleep in the fabric, constantly push it against my face, swim in it, you know sweat in it, to just see how the performance of the fabric and also for fit, it's such a core part of any garment. Jerome: I'm always constantly removing myself from being the owner or product manager and putting myself in the customer's shoes and saying "Would I buy that, would I wear that, do I understand that?"
Stroller Co (Phil & James)	Phil: We're all parents too and so there's enough people in the business, different ages and stages, that know a lot about parenting and so we can draw internally and act on what we feel and for us it's good enough.
	James: There is a habit in the market place for companies to think "Ooh, we need to create a brand story to talk about ourselves in a way that galvanises the attention of consumers." And whilst that's great, we kind of turn it around and we think that's more honest and has more integrity to it as well. We say, "Listen, we've got parenting experience, we've got great ideas that are coming out of our own parenting experience here so our focus is actually, or should be, helping parents to live a dynamic life with kids," because that's actually what we're trying to do, so if that's what we're trying to do we can help others do the same thing. So we talk about helping parents adapt and survive the crazy world of parenting, so that flows through all our marketing. But also behind the scenes, we're saying to the designers when they come to us with a product idea, "Is it adaptable or does it help parents adapt some part of their life?" and if the answer's no well we say, "Well this isn't true to what we're trying to do here, so back to the drawing board chaps."
Joel	It's really taking a different sort of approach to it and saying that well design is really important; it's not a Jesus Christ solution; it's got to be deployed correctly and it's got to be empathetic to the other stuff; it's got to be empathetic to production, marketing, sales. In many respects I have heard, I can't remember who it was, but I think it's probably fair to say that design done very well can be a very strong pivot between disciplines. Because everyone's affected by all facets I think. Bad production means sales guys don't get orders on time or it's poor quality so they get it in the neck. Poor sales means production gets stuff up because their forecasts are wrong so there is a relationship between everything but I think that design may be one of those of things where uniquely and maybe the categorisation of what is a design-led firm is maybe they just have better integration.
Home Help (Mark)	Our own sales force are the ones that are hardest to move into a new space, because the process of selling is a day-in, day-out process and any sort of disruption trips them up, and their focus is day in, day out "I've just got to move these boxes. I've just got to move these boxes." They're less concerned about the ultimate brand direction that we're heading in and preserving our brand values, and how we present ourselves in the market, because all those sorts of issues are built over a longer term, and they're not interested in long term. For them long term's next week, because they're dealing in a very, very immediate world, and marketing's job is to try and drag them on the plan without taking away the tools they need to deliver on their day-to-day objectives as well.
Music Maker (Saul)	It was important to make people understand that unifying messaging didn't mean that everything had to look the same 100 %. I often compare it with a family: the mother likes classic, the father likes jazz, the son likes electronic music, and the daughter likes rock n roll. They all might dress differently, but they are all very happy as a family because they share some very strong values. This is for me very close to tone of voice, and where we say "We don't all have to look the same but we do have to share some consistency in terms of expression."
Jackie	I think that's one of the key things. It has to be working in teams, multiple viewpoints and I think a lot of designers find that very hard. A lot of designers find that hard to, one, to be able to work in teams, two, to be able to look outside of design to understand how the company works, what the impact of their actions are further up the line with packaging and down the line in terms of assembly, and also to understand what drives the marketing aspects and how to harness them rather than working against them.

Appendix D. Future emphasis

Nature Clothing (Edith)	I'll tell you a fairly huge social trend that's happening is the eco-awareness movement. So I'm looking at that in my mind for my collection, thinking, "Okay, so this is what is important to my customer at the moment. They're really looking about their ecological footprint and so on." A few years ago it was travel, people were really into exploring, travelling the world and so on. And so now I sort of feel as though it's kind of waning a little bit and that, you know, these people are tempered by the carbon footprint issue with travelling. And so, you know, it's just how our collection at the moment still is for travellers but you know, they've got a slightly different need than what they had before. So, yeah, it's really just … they tend to be slower moving, longer lasting and just wider. Yeah, it's just sort of reflecting the mood of the world really, rather than what's hot this week.
Swift Ships (Larry)	*[I: When you say mega trend, you think something that will be with us for a while?]* Yes absolutely, absolutely. So how does that relate? The aircraft industry is going to lighter materials, more carbon fibre and the efficiency of engines has gone up enormously, lightweight materials in the cabins, microfibers and all sorts of things, there's all these new technologies that are gradually coming out that is going to make life a lot better. And as they become more mainstream, we've got to look at; as I say weight is part of our culture and we do that in everything, no matter whether it's seating fabric or any of the structural things. Where we paint a boat or not paint a boat, whether we paint vehicle decks as against sandblasting it. We can save about seven tonnes of paint by not painting it, only sandblasting it. So it's all that weight you don't carry around for the life of the ship, which burns fuel.
Spark Co (Philip)	One of the roles of the design group … this woman Katherine I've got working with me, she's been the old core-competency analyst and she's currently working in the area of looking out and seeing what's happening in the world, looking for the future of technologies and things like that and then we'll go and start mapping out our processes to see which area is worth us investigating and then hopefully come up with products that way. Trying to change that to be more active—we're only green at that at the moment.
Kitchen Friend (Aaron)	This is a collectable range of products so it never goes out of fashion. If you bought something 10 years ago and you buy something today, it looks entirely different, it's still going to fit, it's still going to hold five pound of flour, half a pound of coffee, that sort of stuff.
Stroller Co (Phil & James)	James: We talk about helping parents adapt and survive the crazy world of parenting, so that flows through all our marketing. But also behind the scenes, we're saying to the designers when they come to us with a product idea, "Is it adaptable or does it help parents adapt some part of their life"? And if the answer's no well we say, "Well this isn't true to what we're trying to do here, so back to the drawing board chaps."
	Phil: Part of that focus on adaptability, which is helping parents to adapt their life, live the life they want is how do we make it easier for them by making products interoperable. One of our key products is our inline buggy. We've got four of those now, four different inline buggies and each has a double kit that clips on and clips off to the front or the back so the buggy so you can take one or two kids. One of our designers went to us one day and said, "If the parents buy this at the time they have one child, that double kit just sits around doing nothing, that's not that useful to them so why don't we create something for them so they can use that as a bouncer?"
Home Help (Ian)	We have existing platforms that we need to continue to keep competitive, and they tend to generate most of today's income, so they're very important to us, but as well as that we're looking to invent the future and develop the future revenue streams. So that's all about the kind of the far reaching stuff or the innovative stuff or the radically new or whatever, and just stuff that the market hasn't really seen before. So we kind of run both in parallel.
Swift Ships (Larry)	We constantly try to innovate to reduce the weight of the boat I guess to reduce the man hours … *[I Is that a speed issue?]* Yeah because we operate above the hump of normal boat planing speed, weight becomes crucial. Like if you're too heavy you'll just get stuck and you won't actually get up. It's not like you'll lose a couple of knots, it's ten knots and 15 knots or something, so it's a big deal. So we've got to constantly innovate.
Stroller Co (James)	We also think about, as Phil said before, timeliness and speed to market. We hear stories a lot from companies that we hold in high regard of the latest product that's about to drop and it's four years late and it's several million behind budget and we think "How does that happen?" Why would you take that

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	long trying to get something "perfect" when no product is ever completely perfect? You always want to innovate it, you always want to improve it, but if you've got to a place where it's beautiful, it works, it's well refined, it's well resolved, it's a quality product, and you got it there swiftly, why not get it into market and start earning revenue off the back of that? Because you can always innovate constantly further on. So we talk about the continuous innovation programme. We're constantly innovating our products. We're sometimes doing so much we fail to keep retailers up to speed of what we're doing and we sort of forget that we've made a few alterations to products that we haven't alerted them to. We think that's just a better way of operating.
Shower Co (Sarah)	There's always ongoing improvements to things like [product name], new generation [product name], things like that, that carries on, but if there's one technology there then we can just use it; if it's a tapware technology we can use that as well. So it's a bit of a balance for that, but that's a key part of our business as well, and make sure we pick the right projects, we get those projects out as fast as we can without killing ourselves and then make sure they're reliable.

Appendix E. Aesthetic emphasis

Mick	It is not a theory. The outcome actually goes out to the big wide world and lives according to its merits I guess. So you are confronted with whether you have succeeded or not by how it survives in the big wide world. So I came to the conclusion that you needed a different term. I reclaimed the word manifesto because of its relationship with the word manifestations. So an organization is known by the way it manifests itself through its products and services, its visual communications, all its communications and its operational environments.
Annabel	I think design is always having to walk the line between. It's language, so there's no point talking to somebody in a language that they don't understand. But there's always going to be … if we do use completely familiar language that's just not going to cut through. So you have got to do both.
Brash Co (Nadia & Cami)	Nadia: I think it's just recognising that it's all one big whole thing. It's not just about having cool designs, or being anti-establishment. It's just … Cami: It's the whole package … every single part of it matters. If you drop the ball in one part then you're going to pay for it somewhere else. Yeah, I think we always try and think about that in every action we take in the business.
Mick	I think the crucial point about the dish drawer is that it shifted the whole perception of who Home Help is and what it has to offer in the international market. They have always been committed to research and development. They have always been innovative. They have done lots and lots of things that they have patented but most of it is buried in the workings of it and it is not externally apparent. Once the dish drawer was out in the market that made people stop long enough to say, "Hey, who the hell are these Home Help people? Let's just look a bit more closely at this smart refrigerator and the smart drive washing machine." What they are doing now is going back and revisiting their products in a way that creates an immediately visually apparent point of difference, which is seen to have benefits to the user. So the [product name], I think, washing machine is one that is on the market now. They have shown their gas top with the glass top and the little you switch it on and the trivets rise up out of the glass and the burner rises up and when you turn it off it all just goes flat again, and there are others.
Shower Co (Walter)	What we did is we developed a design language. I wanted to create this modern, contemporary, crisp design that can evolve over a period of time and so we started with one, it was a shower head, very simple, just one function. From there we've just created different iterations of that design language for different products, so [product name] on the right hand side over there is an evolution of that, the same sort of language, same colour swatching between, same sort of geometry, and it really is creating a language of our own. So what I really want is when people walk into a store and they see our product range, though in some cases we might need a brand on there, they know that it's going to be a Shower Co product because of the elements that are within each product.
Jeffrey	*[I: As we were talking design orientation, in your view what does that mean, what does that conjure up?]* It probably conjures up companies I would suggest like the Dyson organization, the Dyson brand where they clearly have a product offering and part of the build of that product offering is the notion that they have a unique design and technology that underpins their product, every manufacturer would obviously have tried to create a unique offering but Dyson would epitomise to me where technology, and I suppose its manifest appearance after that, is clearly put onto the market place differentiating itself from anything else. Other products in that category for example will be products that have functions and have features and so forth, but they don't sell that in the way that they're using the word design that there has been some sort of special thought process behind it. There probably has of course but Dyson would be something that really pushes that I guess.
Kitchen Friend (John)	The product's got to talk to you. We spend a lot of our effort in looking at what that customer attraction is all about and how do we present the packaging to get them to go there in the first place and look at it. Regardless of whether the product's any good or not, it makes no difference. They've got to get to it. They've got to see this display which is, you know, we use to have individual packaging and all sorts, trying to talk the product into what it does instead of saying to hell with that, just let's flirt with the customer and get them to come across and touch us and then once they get touch and feel, open the product up, then they start to say well, this is what I want.
Home Help (Craig)	The beginning, it doesn't matter what project you're talking about, or what activity we're involved in. It really starts with the umbrella of "Right. What are we trying to do for your brand in the market place? If that's what we want to be, if that's how we want to be perceived, how do we evidence that with the products that we manufacture?"
Spark Co (Philip)	It's quite nice for us in that your message your product is trying to get out, depending on the product is a different thing. If you're making a household item you might have quite a different message than if you're making an industrial product and for us, the actual message we want to get across is "Those Auckland engineers know what they're doing" but you've still got to actually actively put that message into the product, for example, internally, it's got to be right. Because our distributors, the first thing they're going to do is pull the product to bits and look inside and it's got to look elegant yet meaningful. All those bits you've got in there have got a real purpose to it, they say "Yes, the Auckland engineers have actively created this to be a solid, robust, reliable product".
Dream Sleep (Jeremy)	Everything that we do is around a really cool understanding of who we are as a business, what it means to be that type of business in the market place that we're in and I suppose being design basically means to us is that we look at everything that we do with fresh eyes, we look at it from the way of providing something that's unique, something that's different to the market, something that's fun, something that speaks a language and that is communicated right across everything that we do and we're looking for ways within that too that gives us something that's interesting to work for, for a start. So, you know, the internal aspect of it but also too what it does it does give us some leverage for the fact that we know what we're doing something different in the marketplace and being viewed that way. I mean it's a difficult thing to describe I suppose and this whole conversation around what it is to be design-led and what does it mean and what is design and all that sort of stuff. Yeah, I mean I think its knowing who we are and knowing how we do it and knowing how we translate that so that we are a cohesive offer right across our organization.
Dave	What's your company about, how is it identified, what is its graphic, what is its website, how do you promote yourself? OK, therefore we can feed that in at the start of the design process rather than "Here's the product, does it fit or doesn't it fit?"
Medi-Tech (Joseph)	*[I: Just looking at the brochures, the products all have a very clearly defined look to them so that's always a plus, so there's a clear identity in those products.]* Even things like this. I think the company … you know that paper, it just feels nice, it's quite … we've showed this to a few surgeons and they said "Well 'that's pretty nice." Hopefully they pay more because they like the feel. We want to push that a little bit more, just that bit more upper end of the market niche type thing.

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