ENHANCING THE ROLE AND USE OF THE DESIGN BRIEF TO BETTER ALIGN BUSINESS OBJECTIVES WITH DESIGN STRATEGIES

S. Bolton

Cranfield University, Centre for Competitive Creative Design, Cranfield, Bedfordshire, MK43 0AL, UK.
Email: s.bolton@cranfield.ac.uk

The paper discusses the importance of design to business growth and how businesses and designers can potentially use the design brief more strategically to help better align business objectives. The pilot study explores two main themes: (1) what are the typical components of a design brief and (2) how frequently do designers recommend the inclusion of business objectives within design briefs to clients?

The aim of the paper is to highlight the need for both business and design educators to rethink how they can develop the role and use of the design brief and its potential role as a key mechanism in helping to measure innovation and business performance of design.

Keywords: Design leadership, Business objectives, Alignment, Design strategies.

1. INTRODUCTION

The paper discusses the importance of design to business growth and how businesses and designers can potentially use the design brief more strategically to help better align business objectives with measurable design outcomes. In order to position the pilot study a literature review has been undertaken in order to identify emergent issues and current barriers to aligning business objectives and design strategies. The pilot study has gathered data via a web-based approach, selecting an initial sample of 30 companies/organizations. The sample selection method was based on a word search method identifying companies/organizations that are actively promoting design brief guides lines to potential new users of design. It is acknowledged that web based approach does have limitations in terms of repeatability. The pilot study explores two main themes: (1) what are the typical components of a design brief and (2) how frequently do designers recommend the inclusion of business objectives within design briefs to clients?

2. IMPORTANCE OF DESIGN TO BUSINESS GROWTH

Investment in innovation is now seen as a significant contributor to the maintenance and growth of many country economies [1]. Two-thirds of the UK's private-sector labour productivity growth between 2000–2007 can be attributed to non-traditional R&D innovation activities, in the from of investment in design, the development of innovative skills (design thinking), maximising brand equity and creating organisational innovation [2]. The link with exploiting innovation and growth has been clearly established and NESTA has determined that companies engaged in innovation experience four times the sales growth of non-innovating companies within the same sector. Nearly two-thirds (59%) of

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UK businesses agree or strongly agree that there is clearly a positive link between investment in design and profitability [3]. These findings help to support the argument that design is the process that can help seek to optimise consumer satisfaction and company profitability through the creative use of major design elements [4]. Verganti [5] has raised awareness of the growing importance of design-driven innovation by demonstrating despite their relative size, brands such as Artemide, Alessi, Kartell, B&B Italia, Casina, Flos and Snaidero have grown beyond their industry average (between 1994 and 2003) not through distribution, market penetration or low labour cost but through design-driven innovation leadership. It is therefore understandable, even in challenging economic times that innovation remains a strategic priority for many companies [6] and design remains a key strategic and tactical component of that process.

Design in its transformative capacity can help improve the ability to cope with change, interpret new markets and help organisations review their position within new and emerging markets [7]. New trends are emerging that represent fundamental challenges to current producer centered models of innovation. The decline of design and communication costs, the proliferation of user and open collaborative innovation models are encouraging widespread creation and modification of consumer products by consumers themselves independent of producer involvement [8]. Many organisations are anticipating that their current established markets will become gradually less dominant within their business futures over the next few years, with more emphasis being placed on unlocking innovation opportunities in rapidly developing economies [6]. Increased numbers of organisations are also adjusting their innovation strategies and tactics, reflected in a growing sensitivity to cost, with greater emphasis starting to be being placed on product improvement as apposed to new product launches of previous years [6], due in part to growing difficulty in accessing finance facing many organisations, in particular SMEs [6]. De Mozota [2] makes the case that design is still good business citing design as a source of increased sales, better margins, improved brand value, greater market share, better return on investment (ROI) and deliverer of socially responsible design. Lockwood *et al*. [9] argue that as businesses increasingly recognise the power of design to provide significant benefits, business executives are increasingly asking for metrics to evaluate the performance of design. This view is supported by the Boston Consulting Group 2010 findings that many organisations are dissatisfied with their innovation-measurement practices. NESTA [10] argue that traditional innovation metrics fail to adequately capture 'hidden innovation': innovation services, the public sector and creative industries, or new trends in open and user-led innovation. In an attempt to address this issue, Lockwood *et al*. [9] propose ten categories of design measurements relevant to business criteria with the aim of providing a positional framework for measuring the value of design based on: purchase Influence/emotional value; enabling strategy/enter new markets; building brand image and corporate reputation; improving time to market and development process; return on investment (ROI)/cost savings; introduction of new product and service innovation; increased customer satisfaction/development of communities of customers; development of design patents and trademarks/create intellectual property; improved usability and sustainability. Currently only two key innovation measures are consistently used by organizations: (1) customer satisfaction and (2) overall revenue from growth [6].

A key concept linked to innovation is differentiation. Porter [11] describes differentiation as being one of the strategies that a firm can use to achieve competitive advantage, distinguishing the firm as superior to others. The Harvard Business Review on Innovation [12] states that the most profitable strategies are built on differentiation: offering customers something they value that competitors don't have. De Mozota [13] positions the value of design, in relation to SMEs, as its ability to help organisations to differentiate, integrate and transform innovation opportunities. Design helps build competitive advantage when adopting a more customer orientated approach that supports the development of brand equity, building customer loyalty, establishing price premium [7]. Weiss [14] reinforces this point by arguing that design is a potential innovation engine that can help lead organisations from 'discovery' to 'delivery', advocating that design (process) can act as an enabler through its capacity to perform as an integrator due to its ability to locate itself at the intersection between human factors (desirability), business factors (viability) and technical factors (feasibility). The ability to use design to differentiate, integrate and transform innovation opportunities within

a continually changing business innovation landscape is becoming more and more important. De Mozota [7], when discussing design as transformative resource, advocates that organizations that use design effectively improve their ability to cope with change. This belief is supported by a recent British Design Council survey [3] where over half (54%) of firms surveyed believe design will help them stay competitive during the economic downturn. However, from multiple sources and differing perspectives, governments, organizations and companies are indicating that they are all facing complex challenging problems that traditional approaches to problem solving will not address. These are often referred to as 'wicked problems' [15]. Key players such Martin [16], Lockwood [17] and Brown [18] advocate the use of divergent and convergent thinking to help multiply options to create new choices, the testing of competing ideas against one another, in order to increase the likelihood of more compelling, creative and disruptive ideas — this is referred to as "design thinking". The integration of design thinking into organisational innovation process is now becoming more critical. This belief is reinforced by Neumeier's [19] assertion that innovation is a numbers game with the winners being the companies that can increase the total number — if not the percentage — of viable options.

Design in its integrative capacity is a resource that can improve new product development processes, user-orientated models and fuzzy front-end activities [7]. A significant number of studies have identified that a lack of thoroughness in identifying real needs is a key factor associated with product failure [20, 21]. The fuzzy front end [22] is a key area of activity for unlocking, often hidden, innovation through design thinking [18]. Strategically the role of hidden innovation has been found to be important even in sectors where traditional levels of R&D investment are low [2]. Design plays an active role making direct contact with customers and end users and potentially unlocking hidden innovation. Developing a deep understanding of users and customers has been identified as one of the best sources of information about new product ideas and that experiencing the use environment of a particular product, function or task is a prerequisite for generating high quality information [23–26].

The rationale of why design is important to business growth can be attributed to five interrelated factors: (1) design has the potential to bring to bear the tactical delivery of improved performance and company growth through innovation; (2) design has the ability to help organisations to differentiate, integrate and transform innovation opportunities into competitive advantage, helping organizations to distinguish themselves as superior to others; (3) design thinking has the capability to help solve complex problems and increase the likelihood of more compelling, creative and disruptive ideas; (4) Design has the capacity to help improve an organisations ability to cope with change, interpret new markets and help them review their position within new and emerging markets; and (5) user centred design approaches have the capacity to develop deeper understanding of users at the fuzzy front end, enabling organizations to unlock hidden innovation.

However, this then raises the question of why are we still suffering from miss-alignment between business objectives and design?

3. VALUE OF DESIGN IN ACHIEVING BUSINESS GROWTH

The value of design and its ability to help organisations to strategically and tactically differentiate, integrate and transform innovation opportunities is well established [13]. On the other hand, the issue of the alignment of business objectives and design strategies, or more importantly miss-alignment is one of the central themes of this paper. Philips [27] argues that business objectives underpinning the desired solution must be clearly articulated. Lockwood [9] provides us with an insight that affords a potential way forward in how we could improve the alignment of organisational business objectives with (appropriate) design strategies, when he suggests that if designers and strategists could share with each other a clearer understanding of business goals and objectives it could be a powerful force.

Therefore where does this process logically start? Philips [27] provides us with a clear signpost by stating that the business objectives section is probably been the most important section of a design brief. Yet it is also the one section that is most often left out! He goes on to argue that for design to be valued, within a corporate context, design not only needs to be great but needs to: (1) solve the stated business problem and (2) meet the business objectives. He advocates that the only way that non-design

business managers will accept the design profession as a core, strategic business partner is when they see that designers and design managers also value measurable business outcomes. In parallel to these clearly articulated suggestions, our Centre had started to observe from our current applied research activities with organizations that current approaches and emphasis on measuring innovation appear to be predominantly based on 'post-innovation' activities, for example the Innovation Index — NESTA. This raised two key questions:

1. What are the typical components of a design brief?
2. How frequently do designers recommend the inclusion of business objectives within design briefs to clients?

The staring point for our initial thinking has been based around the notion that for a design solution to be truly effective it must solve a problem defined in a brief [27]. Also the development of the design brief is linked to front end activities and it can therefore be logically argued that the design brief is, or should be, the common starting point for all design projects.

We anticipated that we would be able to mine a rich stream of data and publications about the design brief. However when looking at the subject of the design brief there is surprisingly very little published in peer reviewed journals, considering that all design based projects start from a brief or design specification. We have therefore set out to try to understand how and why the design brief has evolved and to start to explore the two key questions. Our selected starting point has been the 1980's. The rationale for this starting point is that this period can be linked to a substantial growth in interest and use of design within new product development practices and the emergence of design management as a recognized discipline and role within commercial design practices.

Greater emphasis emerged on the role and use of the design brief during the early 1980's as the industrial design and industrial design engineering sectors started focusing on the application and use of design specifications that aim to establish a product specification integrating market and technical feasibility. Key advocates where Pahl and Beitz [28], Oakley [29] and Pugh [30]. Oakley [29] helped to articulate why the emphasis during this period was being placed on the use of design specifications. He states that inadequate specifications often lead to delays in product development and designs that are costly to manufacture and ill-matched to customer needs. Pugh [30] argues passionately that the product design specification should form the bedrock upon which any competitive design should be based. The work of such pioneers contributed to a general move towards formalizing and developing more systematic approaches to design management. The aim was to help organizations and designers manage the design process and projects more effectively within manufacturing organisations, ultimately leading to the development of the British Standard on Product Design Management issued as BS7000 in 1989.

During the late nineteen eighties considerable research was being done on understanding the primary factors impacting on successful new product development [31–33]. It is within this context that the spotlight started to shed light on the importance of the design brief within the product design and development process. Hart *et al*. [34] established that organizations that the use of multi-disciplinary team approaches tended not to separate design from other parts of the product development process. This connected to and supported the finding that successful foreign companies typically used more formal briefs, developed through a group-based approach, containing more comprehensive sets of product requirements and involved more multi-disciplinary input to develop the brief [35]. Subsequently Verganti [5] has highlighted the importance of multiple perspectives as a success factor in developing design-driven innovation. In the early nineties the focus shifted more towards fulfilling customer demand. Roy [35] identified three key groupings of information that he attributed to developing effective design briefs: market requirements (need, demand, target market and selling price); design requirements (function/performance, appearance/image, ergonomics, materials, size/dimensions, relevant standards, compatibility with existing products) and budgets/timetables (finance for product development, date of introduction/timetable). Retrospectively the strategic emphasis appears to be positioned at a demand driven project level. Walsh et. al. [36] argued that the design briefs should be based on an accurate understanding of customer requirements and/or market

opportunities. They also established that a key feature of successful companies was the amount of effort they put into the briefing stage of a project. At the same time a considerable amount of research was being undertaken to understand the problems attributed to troubled NPD Processes [20], two key factors impacting on the development of an effective design brief emerged: (1) 'Ad Hoc' approach to project selection and priority setting and (2) a lack of clear links to company strategy in NPD decisions. Walsh et. al. [36] research identified one of the key weaknesses of the late 1980's and early 1990's was that many of the briefs and specifications were rarely produced without some idea of the design solution, often the basic concept had already been tested and undertaken feasibility testing.

There appears an obvious link in pervious years between new product development and innovation strategies and the emphasis and focus of design briefs. Recent emphasis has been placed on measuring design and innovation contribution to business success [2, 6]. However currently no evidence exists that these factors have penetrated industry practices as rapidly and deeply as did quality issues and product design specification approaches. Limited discussion appears to be taking place. An example of the slow pull through of these issues, relates to how only recently the Design Council on the web in 2010 has featured Peter Philips discussing the very issues of this paper. Summarizing Philips key themes he advocates the importance of key stakeholders and multiple stakeholder involvement in developing agreement in relation to business problems and objective setting, arguing that the benefits are associated with: (1) linking design thinking to delivering business objectives; (2) helping the elimination of misunderstanding throughout the entire process; and (3) developing common understanding so that designers/design managers are able to get a better understanding of the business problem(s) and the non-designers get a better understanding of how the problem(s) are intended to be solved.

3.1. Pilot Study

A pilot study was developed to attempt to identify what parameters design companies typically aim to include within a design brief. Based on a grounded theory approach a key word search method generated over 301,000 responses to "design brief guidelines". The pilot study sample was then selected based on the top 30 responses, which included design companies, large public sector companies and government design organizations: 25 from the UK and 5 outside UK. It is acknowledge that the methodology has limitation in terms study population, sample size and methodology.

To evaluate the sample we have used Philips [27] framework as the basis analyzing recommended parameters (see Figure 1): project overview & background; category review, target audience, company

Project Overview and Background	Category Review	**Target Audience Review**	Company Portfolio	**Business Objectives and Design Strategy**	Project Scope, **Phases**,Time Line and Budget	Research Data
-Scope of project -Business needs and objectives *(reason-for-being)* -Objectives of the proposed project Desired outcomes -Duration and key phases -Completion date -Ownership of project/ budget holder Project team members	**Product/Services:** *to be included in project: current -features/ benefits, market share, sales history, sales performance, brand equity in market place, product/service replacement schedule.* -**Competition:** as above. **Pricing and promotion:** *pricing and promotion methods to be used, competitors pricing and promotion.* **Brand:** *strategy, positioning, equity, competitors brand evaluation.* -**Category/Industry Trends:** *user trends, category trends, industry trends, environmental trends, technology trends.* -**Company Business Strategy:** *pricing, quality, ethics, sustainability for example*	-Geographical location: *Country, region, city, neighborhood.* Gender Profile -Segmentation profile Lifestyle profile -Aspirations profile -Functional requirements / aspirations -Use environment -Trends: *lifestyle, technology, socio-economic*	**Brands:** *strategy, positioning, equity.* -**Product ranges:** *positioning, price points, technical performance.* -**New initiatives**	-Category and sector business objectives -How project objectives align to business objectives. -Price point positioning -Sales and distribution channels -Advertising and promotional strategy -Project Measurement metrics:	-Stakeholders: *Reporting structure* -Project team structure: *director, manager, staff* -Scope of project: *activities to be undertaken, constraints identified* -Phases:*time frame, activities,deliverables* -Approval Process: *stage gates* -Budget/cashflow forecast Completion date	Should include all core data that other functional team// departments/project teams have used to base their critical decisions upon

Figure 1. Design Brief Parameter, Adapted from Philips (27).

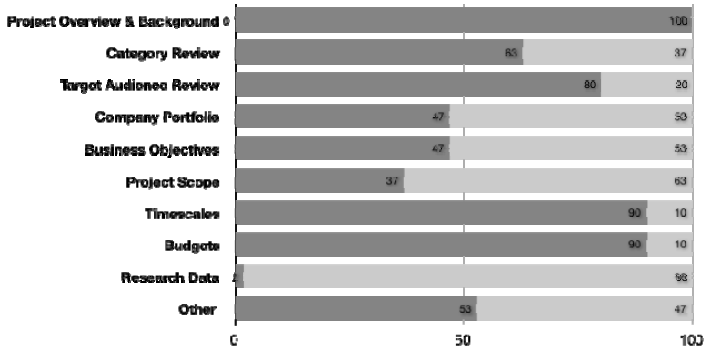

Figure 2. Most Frequently Quoted Parameters.

portfolio, business objectives, project scope, timescales, budgets, research data and other. The rationale for using Philip's as a benchmark is that he is currently one of few recognized experts within this field.

In addressing our two key questions our pilot study determined that it was currently not common practice for designers to recommend to clients to include business objectives within a design brief (see Figure 2). Only 47% of sample included business objectives as a parameter. The key parameters most frequently quoted where:

- Project Overview and Background (100%)
- Timescales (90%)
- Budgets (90%)
- Target audience (80%)

The least frequently quoted parameters where research data (1%) and project scope (6%).

In reviewing the number of parameters that are the commonly included within the sample design briefs we established that only 37% included 6 parameters and that only 27% included 7 parameters. See Figure 3. What was significant was that only 55% of the sample with 6 parameters and 25% of the sample with 7 parameters included business objectives as a parameter.

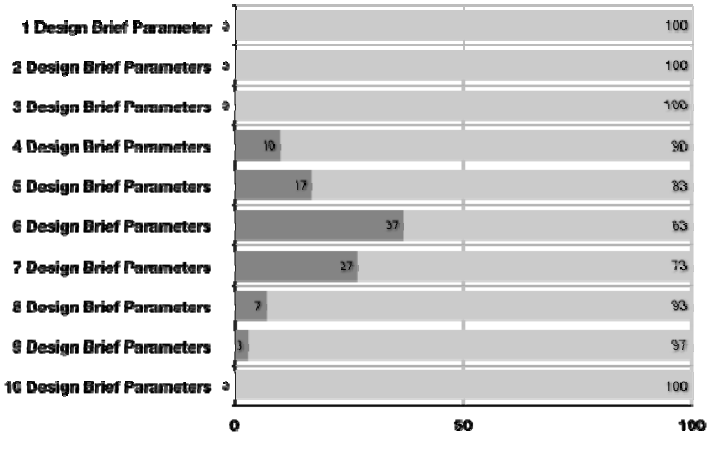

Figure 3. Number of Parameters included in a Typical Design Brief.

4. CONCLUSIONS

When examining the findings from the pilot study it appears that the design brief is seen more as a contractual delivery framework rather than a strategic tool for aligning business objectives with design strategies. Our findings highlight the dilemma identified by Philips [27] that for non-design business managers to accept the design profession as a core strategic business partner, this will only take place when they see that designers and design managers are embedding business objectives into the design brief. In order for design to be able to more easily demonstrate and measure its value to business we need to establish a mindset shift in how both businesses and designers use the design brief to align objectives with measurable design outcomes. This presents opportunities and challenges for both business and design educators of how we can develop the role and use of the design brief and its potential role as a key mechanism in helping to measure innovation and business performance of design. The next step is to undertake a more extensive study comparing how businesses and designers develop and use the design brief and the implications this has for educators.

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