# The role of value proposition in new product innovation - a development for design education

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Abstract: The use of the construct 'value proposition' is becoming prominent in the world of design, as business and marketing intersect more with the processes of design. Value proposition can be a powerful way of capturing, or modelling, ideas for products, rather than the actual realisation of those products. The paper makes a case that the creation and articulation of value proposition is a necessary design ability that should concern design educators, in the same way that other modelling activities are. This is especially so within a discipline such as industrial design where the application of design relates strongly to commercial new product development. The teaching and learning of early, front end strategic innovation to design students is discussed. The building of an explicit value proposition 'model' is a key element of this work. The linkage between value proposition and front end user, global and brand research strands is presented. The paper draws on primary and secondary research activities in the areas of design education and professional design which relate to the practices of strategic innovation. Forms, models, and usage of value proposition are identified from literature relating to innovation, business models, and new product development. The paper demonstrates how value proposition can be a universal form of 'upstream' modelling for new product ideas prior to 'downstream' form-giving and technological embodiment.

*Key words: Value proposition; design education; ideas innovation*

## 1. Introduction

The purpose of this paper is to illustrate the emerging use and usefulness of an abstract concept, namely "value proposition", in the field of design. The paper will describe different perspectives and manifestations of the construct, as it has been utilised in areas of business, management, strategic product innovation, commercial new product development, professional design practice, and design education.

The use of the term "value proposition" began in the world of business, primarily business accounting and then strategy for business innovation. It has now been widely used in business modelling, especially by entrepreneurs and new business start-ups. Now it, and similar concepts, are being adopted in the design world.

If one looks through the successful products in numerous product design competitions which flourish around the world it is very rare to find a winning product which has been awarded an accolade purely on the basis of its aesthetic appeal. Juries and judges will expound the product's value to people, to the environment, to a brand, to a society or culture etc. This is about the value of the conceptual idea embedded in the product's physical realisation. This is the core of the construct of value proposition.

The research methods utilised in the paper were literature review, investigation of prominent design professionals (through personal interview and examination of publicity material), and reflection on personal teaching activity.

The reader will gain an understanding of the origins and recent usages of the value proposition and how it has now been adopted by business and design management. Additionally, the paper goes on to explain how value proposition can be built into industrial design education, including examples of teaching material and student work.

## 2. Established Uses of Value Proposition

This sections offers various descriptions of value proposition as it has been utilised in different fields of business and commercial activity. Examples are offered from contemporary, relevant sources in commercial new product development, new business modelling, and professional industrial design. The inclusion of these is meant to provide rationale for including value proposition as a core modelling concept for university students studying design.

### 2.1 Business and Management

Value proposition has perhaps been used for the longest time as a general business, management, and financial accounting principle. It is promoted as a component of business strategy. Kaplan and Norton [8] used the concept of "Strategy Maps" to describe how the business organisation creates (primarily financial) value. This is outlined as internal business processes.

### 2.2 Marketing and Advertising

The exploitation of the term value proposition has perhaps been most widely seen in the areas of business marketing and consumer advertising. Customer Value Proposition (CVP) is a marketing statement detailing why a customer should buy a product or service, Anderson et al [1]. In his high-tech business marketing book Moore [11] provides a five-part template for a "Value Proposition Statement":

1. Target users
2. Unmet needs
3. Proposed product
4. Key benefits to users
5. Differentiation from competition

Hudadoff [4] also provides material which is business marketing-based but based on the concept of customer value proposition.

### 2.3 Commercial New Product Development

Philips is a major multi-national corporation, operating across numerous product areas such as lighting, healthcare and domestic appliances. As a corporation Philips employs a process of building a commercial and user centred case for developing new products. It calls the outcome of this work its Value Proposition House. A Philips publication [14] is states:

*"Across the company we are using a tool called Value Proposition House, which is a standard way of representing a value proposition we want to bring to market, capturing what's in it for the target group, why they would believe it, and what makes the offering distinctive."*

## 2.4 New Business Modelling

Recent years has seen the rise in business start-ups as a significant part of the landscape of the commercial world. The small business entrepreneur is now a hero in business and innovation. Much interest has been shown, and developed, in how businesses can be modelled to successfully communicate what they can do, and will offer. Entrepreneurs are urged to build a business model with their customers at the core, and with a value proposition clearly identified and explained.

The book Business Model Generation by Osterwalder & Pigneur [12] puts the value proposition at the centre of a model of new business opportunities. It is described:

*"The Value Proposition is the reason why customers turn to one company over another. It solves a customer problem or satisfies a customer need. Each Value Proposition consists of a selected bundle of products and/or services that caters to the requirements of a specific consumer segment. In this sense, the Value Proposition is an aggregation, or bundle, of benefits that a company offers customers."* (p22)

Tom Hulme is a Design Director at IDEO in the UK, where he develops new business opportunities. He has been inspired by the work of Alex Osterwalder in his thinking on modelling business start-ups. In his "Business Model Framework" [5] he includes a Value Proposition component as:

*"The offer to the consumer, including how and why it addresses their need / fulfils their 'job to be done'. How consumers themselves would describe the benefit."*

## 2.5 Professional Design Consulting

It is an undoubted phenomenon that designers have shifted their place in the world of new product development. An outdated view of industrial/product design is as a problem-solver, brought into the product development process when it was decided what the nature of the product should be. The typical sequence would be for senior management, probably with sales and marketing input, to formulate a design brief. This brief would then be addressed by designers, to generate 'solutions' in the form of new products. The contemporary view of the designer is one of being fully embedded in this so called 'front end' process of new product development. It is accepted that this shift has profoundly changed many aspects of design. Design consultancies such as IDEO [6] now pitch their trade in arenas such as 'business innovation' and 'ethnographic research'. IDEO state how they deliver their innovative value propositions through their design work.

The shift has required designers to seek out new tools and methods to do their business. The need to make sense of research data, for the purposes of design and innovation, has led to new methods of analysis and communication of outcomes. These have been described and documented in books such as Laurel [10], Hanington & Martin [3], and Kumar [9].

Kumar describes a design method called "Value Hypothesis": *"Clearly defining what value the intended solution will create for users and providers"* (p208). The book explains that the concept is rather like an 'elevator pitch'.

UK-based industrial designer Michael Rodber, of Jones Garrard Move [7] utilises a narrative method, blending value proposition with persona. A story of a fictional user of a potential new product or service is crafted so that

the value proposition is revealed and illustrated. Rodber also offers the following definition of a value proposition statement:

*"An easy-to-understand, simple and compelling statement whereby a brand, within a theme, attracts a customer within a defined target market with the promise of a set of clear and quantifiable experiences and benefits by the top-line description of a product and/or service offer that is focused on its functional and emotional needs that is clearly differentiated from the competition, and is sustainable (not easily copied) through innovation and brand DNA."* (Rodber, personal communication).

US design firm Continuum utilise a concept similar to value proposition called "Resonance". By formulating a conceptual proposal which 'resonates' with users and client company it has the basis to move forward with more detailed design work or further commissioned research activities. Continuum [2] uses a proprietary process called "Resonance Testing" for evaluating new business and service ideas with consumers.

The concept of proposition is a powerful element of the new design discipline of Service Design. Joe Heapy was one of the founders of UK-based service design consultancy Engine. In a 2006 publication [13], prepared with Sophia Parker, he writes:

*"The notion of a proposition puts the onus on the provider to 'package up' a service that is useful, useable and desirable and to place it into the market without any assumption that the audience knows the value of the service on offer or how to access it. The assertion of a proposition states the purpose of a service in terms of the benefits to users. Designing a service proposition extends beyond the content of the offer to an understanding of how its audience would like to engage with and use a service – and the emotional journey that each user will need to take in order to benefit from it."* (pp104-105)

It can be understood from this section that value proposition is emerging as a 'tool' in the business process of design professionals. It is a means of encapsulating ideas and concepts, prior to hard-edged design embodiment and realisation. It enables a 'conversation' about potential products to take place between designers and clients.


## 3. Value Proposition in Design Education

Whilst the previous section illustrates how value proposition has been adopted in business and professional design, this section provides examples and rationale for its inclusion in programmes of university-level industrial design.

The teaching and learning of early design process activities such as user research, market analysis, brand, innovation strategies, along with the larger area of 'design thinking' has gained much attention from design educators in recent years.

It seems that an underlying aim of this pedagogical and curriculum endeavour has been to provide more relevant knowledge and skills to design graduates to enable them to somehow become more 'innovative'. Beyond that, apparently simple and obvious aim, there is also the realisation that the work, the outputs, of the design student must have relevance and value to the world beyond the design school.

It is surely a common sentiment amongst many people when they encounter the work of graduating industrial/product design students to wonder what the precise value of the proposed product is. As a visualisation or a physical model, the work can have aesthetic qualities which are admirable. It is critical that industrial design graduates have these abilities. However, there is invariably another judgement made when a newly designed

product is assessed. That judgement has to do with its usefulness to intended users, its usability and sustainability within a wider product ecosystem, and its potential commercial value to companies and brands.

This gets to the heart of value proposition and its importance in design education.

There is a need to educate designers to be able to communicate effectively the value of their ideas. In today's design landscape 'good' ideas are highly prized and sought after. However, it is very common to find student design work in which the idea is poorly explained, or worse when it is submerged beneath over-complex research data or over-glossy computer visualisation. There is also a pressing need for all designers to be able to make explicit their design ideas, and the embedded user and commercial value, before that idea is realised as a product or service. The previous section included examples of how successful professional design enterprises are already doing that.

So, it is argued that there is a pedagogical imperative to include something in a design programme or curriculum which develops abilities to create and communicate a value proposition (or something like it).

In the context of design education, it is useful to view value proposition from two different perspectives:

1. As the end point of front end, strategic design research.

2. As the start point to product design realisation and development.

This occupies a similar territory which the classic 'design brief' used to occupy when products and services were less complex. In a new product concept process, value proposition can provide an effective bridge between upstream research and downstream design.
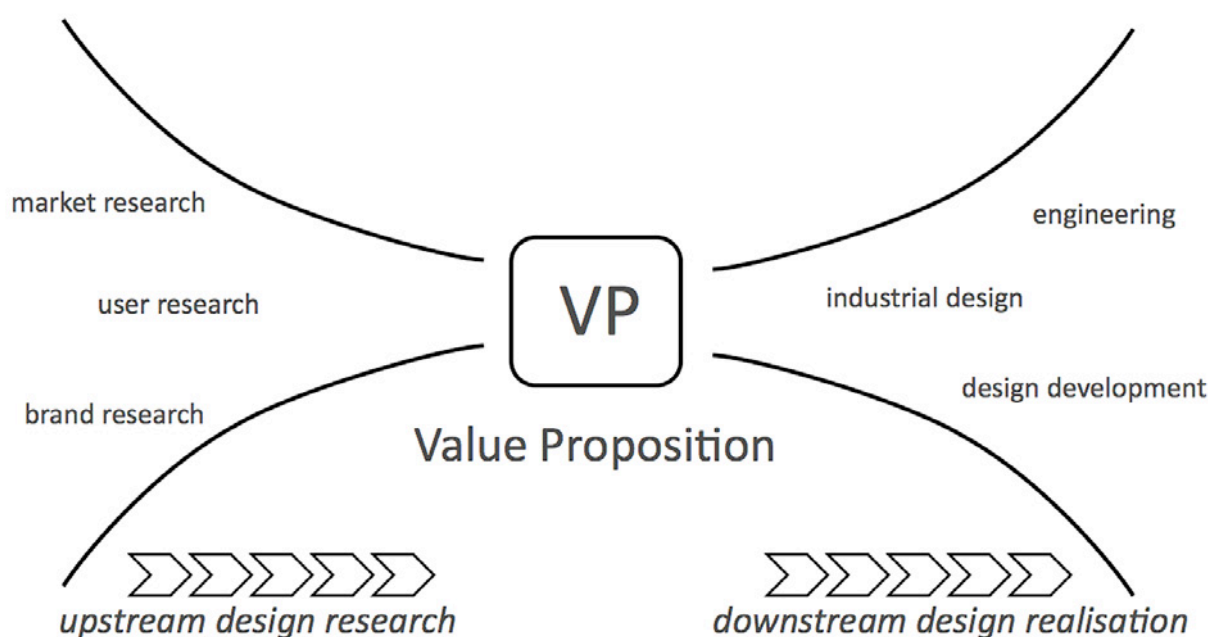


Figure.1 Place of Value Proposition in New Product Development

Figure 1. shows a diagram of how value proposition is positioned between the different upstream and downstream perspectives and separate design-related activities.

From perspective 1. above, the value proposition can be regarded as a successful end point of significant research data gathering, analysis and synthesis. This expression of how to exploit research findings gives the value proposition a standing in an overall process which otherwise might be lost.

From perspective 2. above, the value proposition can be used as the guiding and inspiring principle which can help deliver a successful product outcome. It enables design and development activities to be flexible enough to be innovative, whilst keeping on track with a core set of user and brand benefits. If these are forgotten, there is a danger that finished designed outcomes will be rendered weak, lacking meaning and value to users and clients.

The next section outlines how such value propositions can be arrived at by design students.

## 3.1 Example of value proposition in industrial design education

The author has been promoting the widespread use of value proposition as a modelling concept, and a generative and communication tool, for a number of years. This has been within his role as an industrial design educator at two industrial design programmes in the United Kingdom and Singapore.

The primary usage of the construct of value proposition has emerged as an output of user and brand research, within front end new product development innovation project work. These value propositions have subsequently been utilised by students in downstream product conceptualisation and industrial design activities.

This section proposes the ideal content for a value proposition created by design students. This has been formulated following investigations into professional business and design practices, and reflection on teaching and learning. It is useful to consider the value proposition in two forms or versions. The first is a verbal, text-based output - the value proposition 'statement'. The second is a more designerly creation, a single page document (physical or digital 'board') but with graphical, visual image content as well as verbal content.

This section also shows examples of student-generated value propositions.

**Value proposition 'statement'**

A well constructed, set of connected sentences which includes and encapsulates the following verbal content:

- Product idea - the abstract idea for a product or service (but not the realised design for a product/service).
- Compelling offer of set of emotional and functional benefits - of 'must-have' value to users.
- Target market, the users.
- Theme (an unmet need or problem, or 'job to be done').
- The competitive environment.
- Differentiated - what makes it different to competitors in the market. Offering value to brand.
- Sustainable - what makes it difficult to copy. Offering value to brand.
- Reason to believe - why should target market believe that brand can deliver offer?

**Value proposition 'board'**

It is important that this is graphically edited and crafted into a single page. Its purpose is to communicate, inspire and eventually guide. It must visualise, 'bring to life' the following content:

- Users / target market - often this is material edited from a series of personas.
- Theme / experience - real world evidence and insights (experiential/user-centred).
- Brand - essential values, personality, vision, and reason to believe.

Figures 2. and 3. show examples of student-generated value proposition statements and boards. The content proposed above appears, in different forms, across each board.

Figure.2 Example of student-generated Value Proposition board



Figure.3 Example of student-generated Value Proposition board

Such value proposition boards, with the embedded statements, have been employed by design students to effectively communicate product ideas, essential insights, and context - after following a structured programme of user and brand research in projects concerned with commercially-driven front end strategic innovation. Client corporations, collaborating in the student project have confirmed the critically useful role of the value proposition boards by stating how they encapsulate product ideas, along with business and user contexts, at an appropriate level of detail for strategic decision making. The student designers have also reported how the boards have been useful for guiding and inspiring their subsequent product ideation and development work.

## 4. Conclusions

The construct of "value proposition" is emerging as a generative design tool, exploited by designers working at the front end of new product development.

The phrase "value proposition" is not as important as what it represents, and what it offers through that representation. It offers clarity and confidence in communicating critical issues especially emotional and functional benefits, before a product exists. It is a powerful, valuable output of research that can resonate equally with designers, clients and users. It is an easy-to-access guiding document, a signpost to steer and inspire downstream design. It is also a powerful persuader for new-comers to a larger project.

Value proposition offers designers a chance to model a potential product or service, rather than an actual, defined product. It represents an idea for a product. Such a construct maybe relatively new to design, yet the focus on key user and brand benefits is something which designers have always been concerned with.

Design needs a method of product representation and promotion at a stage in new product development which is increasingly becoming the domain of the designer. Value proposition can provide this product representation and context demanded by the designer.

This paper has presented a novel, successful structure for modelling a commercial, evidence-based value proposition for a potential new product. The core elements of this modelling are a written statement, with defined content, and a graphical board, to provide easily accessible contextual information. This structure has been demonstrated to be effective for undergraduate students of industrial design.

If value proposition becomes a more popular and useful modelling medium for designers, then it is essential for design educators to prepare student designers for this future state. The makeup of the value proposition model needs to be discussed, and formulated for use by a wider audience. Pedagogical issues will arise. This should all concern future research endeavour.

## 5. Acknowledgements

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