

The Use of Design in the New Zealand Furniture Industry

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This paper explores the question of what is required to build design capability within companies within the New Zealand furniture industry. With design increasingly being seen as a means for New Zealand companies to compete against the increasing inflow of imported furniture there is a growing interest in finding ways of using design more effectively. Design is seen as one way in which relatively small local companies can compete against international Asia-based furniture companies who are able to produce furniture much cheaper. Using data from seven furniture companies this paper shows that in most cases design is used in an ad hoc manner. Furthermore, the design activity is usually undertaken by staff within the organisation with little if any design education. When external design specialists are used their involvement and understanding of the broader business is minimal at best and satisfaction with their outputs is generally low. Utilising the strategy dynamics approach developed by Kim Warren, this paper describes the strategic architecture of the furniture industry and highlights the key resources and capabilities that need to be developed if design is to be placed clearly within the business context and deliver increased competitive advantage. This model is then used to develop specific company level recommendations as well as recommendations for policy development by Government funded bodies responsible for supporting industry development within New Zealand.

Interest in design as a means of increasing competitiveness

New Zealand's furniture industry is, with the elimination of import tariffs in the early 90's, facing increased competition from cheaper imports. Produced in large factories, with increasing use of technology and an increasingly skilled workforce this furniture is not only cheaper but increasingly of a high quality making it, at times, indistinguishable from locally made furniture. Faced with this situation many companies have closed, unable to compete. Others are looking to use design to differentiate their product. However many have had bad experiences with designers and others felt their design work was ad hoc and not building sustainable competitiveness. A comment by the CEO of one company sums up much of the feelings associated with the use of professional designers.

“They never propose ideas. They just wait for the design brief and respond to that. When I asked them why anybody would buy one of their designs after they had designed it they were unable to give an answer”.

It is the apparent mismatch between business and design that prompted this work. We were asked by New Zealand Trade and Enterprise (NZTE) and the Furniture Association of New Zealand (FANZ) to assist companies increase their ability to use

designers more effectively.¹ Of particular interest was the desire to work with companies who had an interest in growing and exporting. The funding was limited to companies with a turnover of at least \$5 million.

Design was seen by both NZTE and the individual companies as a mechanism to increase competitiveness and therefore help in the competition against a growing number of imports. The interest in design as a tool for economic growth is best summed up in the opening paragraphs of the Design Taskforce Report:²

“Much of New Zealand’s design is world class. In highly competitive world markets, Kiwi design has given our products an invaluable edge.

However, design is under-used by New Zealand businesses.

For New Zealand, and its businesses, to be operating at the top of their economic potential, we must strengthen links between our highly competent designers and our innovative businesses.”³

This provided the impetus and focus for the work – increase the links between designers and businesses. This focus was modified during the initial consultation so that the focus shifted from ‘help companies use designers better’ to ‘assist them increase their design capability’. This change in emphasis acknowledged that design was not the sole prerogative of ‘designers’. Engineers, technologists, marketing staff etc. etc were all involved in design and it was the process of design, in which design professionals could play a role, that was the crucial issue, not the employment of designers. The focus needs to be on design as a process rather than design as a profession (Blaich & Blaich, 1993).

Current use of design and designers in 7 companies

The initial phase of the work involved the use of a brief survey to explore the nature of each company’s business and the way design was used, if at all. It was our concern that design had to be an integral part of the business and not just an add-on if it was to add value. Design had to be clearly in a business context (Blaich & Blaich, 1993). As a result the bulk of the survey explored the nature of the business, how they measured success and how it had performed over the last five years. Within that context questions about the role of design were asked.

From this survey and the initial interviews with each company a number of themes emerged:

- Most of the design work was undertaken by internal staff with no professional design training.
- Where external professional designers were involved they were used as external contractors on a design-by-design basis.

¹ This work was funded by NZTE and each company involved on a 50/50 basis.

² Design Taskforce Report, prepared for Hon. Jim Anderton, Minister for industry and Regional Development, 27th May 2003.

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- The overall business strategy and design process were not linked.
- The use of external designers was perceived as a high risk venture

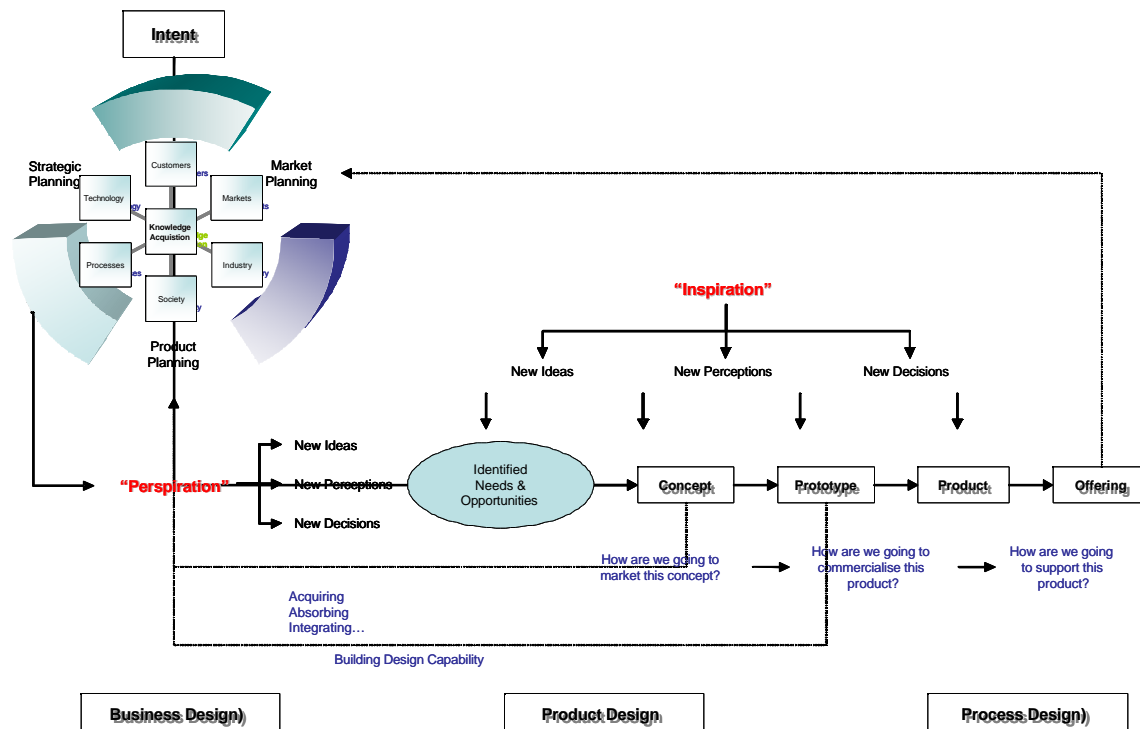
Of the 7 companies in the initial survey 2 employed internal design staff, 2 employed external design expertise⁴ whilst 4 relied on internal staff with no design training, to design new product ranges. Of the four companies utilising professionally trained design professionals none were happy with the outputs, although not all of this was attributed to failings in the designers themselves.

In only one of these companies was design linked closely to the overall business strategy. Whilst many mentioned the importance of design to their business there was no evidence that the investments had been made either in staff or in the clear linking of business and design strategies. In one case where an internal design team existed they were not involved in discussions about market trends and new product requirements. In most cases no design strategies existed. Design was undertaken on an ad hoc basis, when the market demands required a new product range. The naming of product ranges was either determined by the distributor or seemingly in an ad hoc manner by the manufacturer. The description of design briefs rarely went beyond statements like, “We need something more contemporary”.

Framework for Putting Design in a Business Context

In working with each company we developed a framework within which to assess current performance and develop an action plan to move forward. The purpose of this framework was to clarify the links between design and business performance.

⁴ Of the two companies that employed external design professionals one only use them for a particular



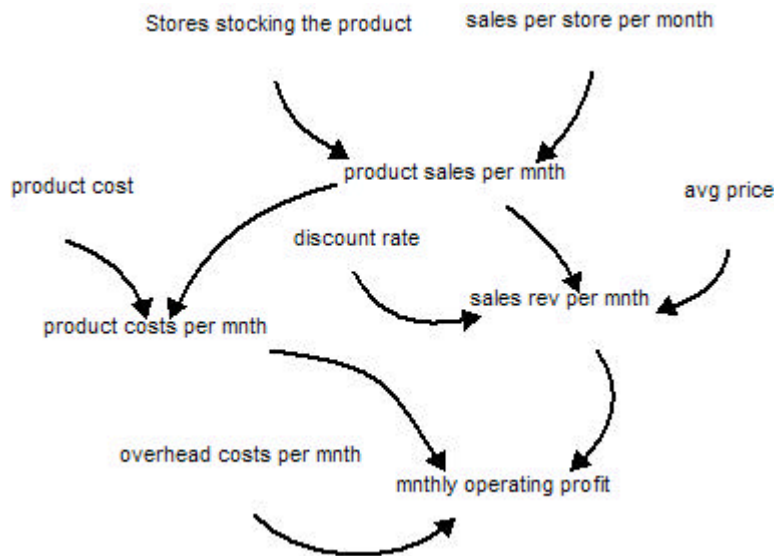
Key points to be made about this model are that:

- Business strategy cannot take place within a vacuum. It must be based on a solid foundation of knowledge.
- Design ideas emerge out of a detailed understanding of what the business stands for and wants to achieve (strategic planning), who the business is aiming to serve (market planning) and what it wishes to serve to those markets (product planning).
- Products sit within a broader offering which includes all those aspects of what is being offered and influence the purchasing decision.
- Building design capability involves the continual feedback of design ideas into the overall business framework and body of knowledge.
- The first design task is ‘business design’. Without a well-designed business product design would continue to be ad hoc and highly risky⁵.
- That product design would not contribute to business performance unless there was good process design that clearly linked the initial ideas to a commercial offering that was well supported in the marketplace.

Strategy dynamics model showing key resources that need to be built

Whilst the framework provided a way of discussing the scope of what needed to be included we needed more specific models that highlighted the key variables that drove business performance. In all case the key focus was on revenue and operating profit. Most had worked consistently over the years to keep costs down and felt that there

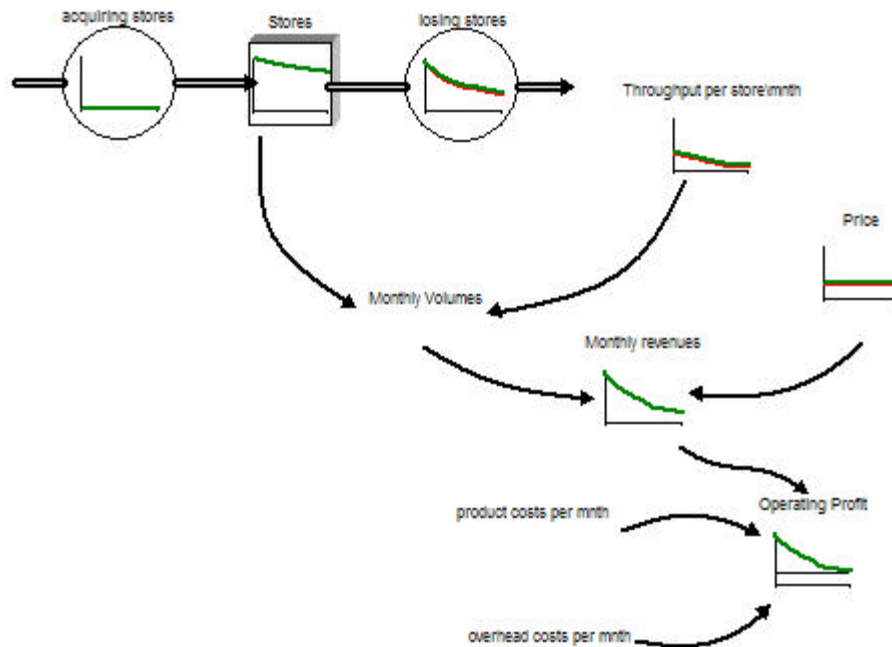
was little more to be gained in this direction. The focus was now on revenue and how design could contribute to this. The key links that drive revenues and costs within these businesses are shown in the following model:



On the revenue side of the equation the key variables are ‘stores stocking the product’, ‘sales per store per month’ and the ‘average price’ minus any discount rates that apply. On the cost side of the equation the key variables are ‘product costs per month’ and ‘overhead costs per month’.

In every case the companies had the data to populate these models. It is a characteristic of these furniture companies that they keep very up-to-date and accurate product and sales data. The data for one company’s product range is shown in the following model⁶:

⁶ Whilst the exact figures within this model have been modified to maintain confidentiality the basic



This model clearly highlights the performance of a product that is in decline. The product grew rapidly during the 1990's but the last three years has seen a continuing reduction in operating profit. Some distributors have stopped stocking the product, throughput through those distributors who still stock the product has declined and prices have remained constant. From peak volumes and revenues in the period 1996-2000 performance for this product line has declined rapidly over the last three years. The company is currently making a loss on this product range.

From this model a further model was developed which explored the areas in which design could impact performance and what resources needed to be developed if design was to have the impact necessary to turn around the product's performance in the market place.

The challenge that had to be understood was how design could impact upon the performance of this product range. Was it possible, through good design, to either improve or replace this product range so that profits were restored within a two year period? The first step was to articulate clearly where design could impact upon this business model. The following model highlights these links:

Two significant issues emerge from this model however. Firstly, that these impacts will only occur if the increased use of design can increase product attractiveness. Secondly none of the companies in the study had any data on the impact of product attractiveness. To assess whether or not any of the scenarios noted above are achievable requires much more work to be done to increase understanding of the factors that contribute to product attractiveness and the impact that can have. This includes understanding the:

- Requirements of distributors that would have to be met for them to reconsider stocking the product.
- Factors that impact upon sales in each distributor.
- Impact that design could have on the price the product could command in the marketplace.
- Possible costs saving that could be gained by better design.

Currently we are working with two of these companies to gain some understanding of these links for their particular product ranges. In one case we are working to improve the designs of current product ranges based on an understanding of the four key issues noted above. In the second case it is to design a new product range to replace a current, ageing range that has shown a decreasing demand over the last here years. In both cases we are undertaking research to understand in more detail what constitutes product attractiveness for both distributors and customers.

Conclusions

Based on this work there are a number of implications for New Zealand furniture companies that are wanting to use design as a source of competitive advantage.

Whilst there is some high level data supporting the use of design and the impact it can have on business performance^{7, 8}, when one comes down to the business unit level there is little that is useful. Companies simply do not know what impact an investment in design will have. There is a hope that it will make their products more attractive but what impact this will have is unknown. The model has been useful however in highlighting these key links and focusing attention on what work needs to be done, not only to make the business case for design at a business unit level but also to direct the design effort. Understanding what requirements distributors have for putting your product on the floor is crucial. Understanding what, have acquired floor space, will attract buyers to your products is necessary if you are to increase volumes through any outlet. The model has then provided a framework for building design capability and focusing effort in individual companies.

From this a number of themes have emerged. These are:

1. That, to benefit from design companies need a much clearer strategic focus that clarifies their strategic intent, how they wish to be positioned in the

⁷ Design Taskforce Report, prepared for Hon. Jim Anderton, Minister for industry and Regional Development, 27th May 2003. Pages 22-25

⁸ New Zealand Institute of Economic Research 2003 report on "Building a case for value though

marketplace, specific goals and what values are important to it in striving to reach those goals.

2. It is also crucial that they have a much richer understanding of customers and markets. As most are constrained by the large distributors who control most of the retail furniture market in New Zealand they need to understand what it is they require. Each company has to first win the fight for floor space before it can compete for customers. Only when these things are in place is design going to be able to contribute to product development in a useful way.
3. If designers do not understand why people would choose to buy their products after they have designed them then design will remain as a mysterious, risky an expensive process which is best avoided.

From a policy point of view the work to date has highlighted that very few of the companies have the resources to export. They currently operate in an environment where the distributors control the branding. Harvey Norman, for example, are interested in developing their own brand, not the brand of those whose furniture they stock. They actively stop this occurring. On the world stage branding will be crucial and it is unlikely that, given the power of the main distributors, more than a very small handful will be able to develop the brand profile necessary to compete on the world stage. Government could play a role by promoting 'Brand New Zealand' within the furniture industry and assisting in developing and managing international distribution channels.

Summary

This work began with the intention of improving the link between business and designers. It quickly emerged that the challenge was about design not designers and that the process had to start with the design of the business. Whilst the use of high-level, static, frameworks were helpful in establishing the scope of the work it was the use of dynamic models that focused attention on the key variables that were required to improve performance. They provided a level of rigour to the debate that has been lacking. The models also highlighted that beyond hope and anecdotes there is little data to highlight the links between design and business performance at the business unit level.

From the perspective of individual companies it has helped focus attention on the dynamics of their businesses and where attention has to be paid.

From a research perspective it has highlighted that if design is to play a key role in developing future competitiveness then much more research needs to be undertaken on the impact of product attractiveness on key aspects of business performance at the level of individual business units.

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