

# How design can improve company performance

by Jan van den Ende, Marina Candi and Gerda Gemser

**Emphasising design and including designers in product development teams contributes to new product success. Likewise, involving designers in developing websites and corporate visual identity helps to improve firm image. When taken together this can contribute to improved company performance. These are the main findings of research conducted in a survey of nearly 400 managers in Dutch firms from both manufacturing and service sectors.**

Design plays an important part in all of our lives. Apple products are held up as paragons of successful design, but there are many other companies that excel at the ergonomic design of their products. Even services are increasingly designed from a customer experience perspective, for example healthcare. For researchers and marketers it is increasingly essential to understand how design can influence the emotions and expectations experienced by those who interact with it. For firms, it's important to gain insight about the effectiveness of design. For example, to what extent does emphasis on different aspects of design in products or services pay off in customer satisfaction, market share and financial performance?

In approaching our research on design effectiveness, the first major issue was to determine what was

actually meant by 'design' as the term can be interpreted in numerous ways (Fig 1). When developing our research model, specific attention was paid to the management of design as well as to other factors that could explain when design processes work and when they

don't. For example, are processes impacted positively when designers are given greater creative freedom? Does it help to combine experiential design – which is about appealing to the senses and emotions – with functional design – the ergonomic and technical aspects?

## Measuring performance

Project performance compared with competitors was a key area covered by the business manager survey. Three performance factors were identified. Firstly, *product financial performance* provides a measure of the financial returns gained from a product. Secondly, what we refer to as *product experiential quality* encompasses a product's sensorial and symbolic quality. Third,

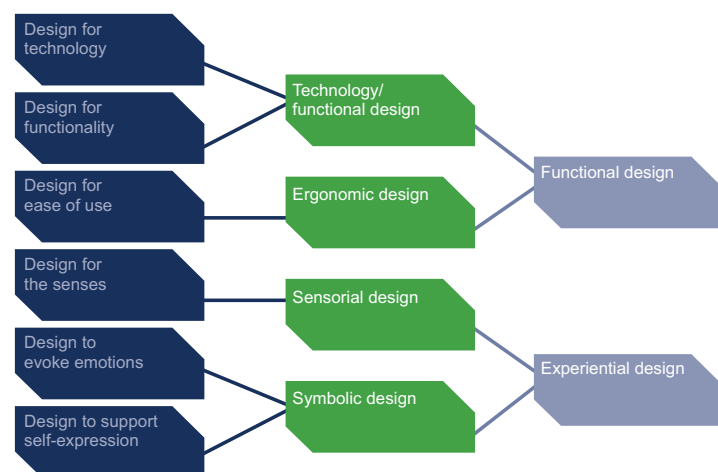


Fig 1: Different types of design

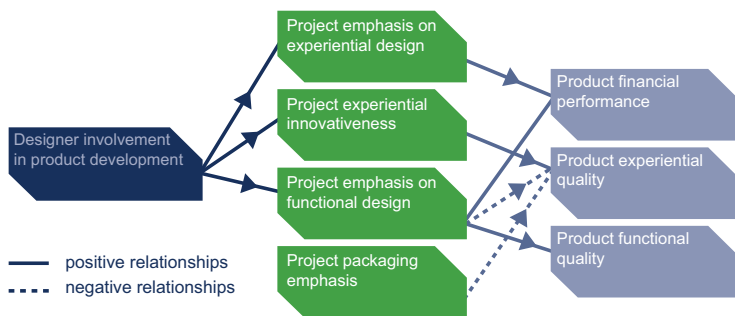


Figure 2: Relationships between the project level (left) and the project performance level (right) for new product development.

*product functional quality*: the quality of a product's technology and functionality and its ease of use.

The contributions of designer involvement and design emphasis to product performance are shown in Fig 2. In summary, the greater the designer involvement in a product development project, the greater the project emphasis on both experiential and functional design.

Detailed analysis revealed that the relationship between designer involvement and the emphasis on functional design primarily rests on the relationship between designer involvement and emphasis on ergonomics rather than functionality and technology.

*Experiential design emphasis and functional design emphasis* are relatively equal in what they contribute

to financial performance. Our analysis indicates that, on average, new product development projects with a high emphasis on experiential design will result in 9% better financial performance than those that have only medium

***“Products with high emphasis on functional design will have on average 10% better financial performance than those with medium emphasis.”***

emphasis on experiential design. Similarly, products with high emphasis on functional design will have on average 10% better financial performance than those with medium emphasis.

Other specific effects are particularly interesting for the insights they offer businesses. For example, project

emphasis on functional design and packaging has a negative effect on the experiential design quality. Of course, trade-offs between technology and aesthetics are not uncommon, but the implications are that if a firm is more concerned with the experiential quality of a product – something that can be relevant to the entertainment, hospitality and cultural sectors – it should emphasise experiential design over functional aspects.

Furthermore, we found that placing a greater emphasis on experiential design contributes more to financial performance if the experiential design of a product is innovative. We also find positive effects and short-term benefits in experiential design quality when designers are given creative freedom

to explore concepts and ideas that might go beyond the scope of the project. Long-term benefits may result from allowing designers to pursue ideas outside the scope of the project at hand as their ideas may lead to new opportunities being identified for future development projects. ▶

# How design can improve company performance (continued)

by Jan van den Ende, Marina Candi and Gerda Gemser

Another interesting outcome, and one that was somewhat surprising, is our analysis showed that the combination of customer involvement and a high emphasis on experiential design weakens the impact of experiential design on experiential quality. One possible explanation for this is that if customers are involved in

perception of it. Our research shows that the greater the involvement of designers in both website and corporate visual identity development, the better the outcome in terms of customer perception. Designer involvement in house style development is positively related with all perceptions of the firm.

*“Firms should consider design right from the inception of the project.”*

product development they are likely to focus on what they already know; they will have a conservative preference for what is tried and tested rather than favour innovative design. However, these outcomes might depend on how customers are involved in the product development process. This is an area in which further work must be done, but our findings fit very well with other recent research on innovation in design.

## Corporate visual identity

The performance of companies' websites is another area in which we have found a positive effect emanating from the involvement of designers at specific stages of the development process. Particularly, this relates to corporate visual identity and customer

Designer involvement in web style development is positively related with perceptions of social responsibility, emotional appeal, financial success and the impression that a firm was a good employer. We also found relationships between the performance of products and websites with overall firm performance.

## Conclusions

A core industry insight that came out of our research is the categorisation of different elements of design. The six design emphases can serve as a useful checklist for organisations. Furthermore, the main practical implication of our study is the evidence that shows the importance of design, and the value of integrating design and designers into the product development process.

Many firms see design as one of the final stages of development: they conceptualise the product, analyse its potential, its markets, and then actually design it. Our research shows that this is the wrong approach to take. Instead firms should consider design right from the inception of the project.

The fact that we have been able to show empirically that emphasising design in product and service development really does contribute to the financial performance of businesses – as well as shedding light on how this can best be achieved – should be useful to help businesses to positively reassess the design emphasis of their new product development projects. ■

**Jan van den Ende** is Professor of Management of Technology and Innovation, Rotterdam School of Management. Email: [jende@rsm.nl](mailto:jende@rsm.nl)

**Marina Candi** is Research Associate at Rotterdam School of Management. Email: [Marina@hr.is](mailto:Marina@hr.is)

**Gerda Gemser** is Associate Professor at the Faculty of Industrial Design Engineering, Delft University of Technology. Email: [G.Gemser@tudelft.nl](mailto:G.Gemser@tudelft.nl)