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## Design Transformation

### Ignacio Germade

Ignacio Germade heads Motorola's UK and Singapore's design Centres and is responsible for Motorola's industrial and interface design for the EMEA and South Asia regions. Prior to joining Motorola, Ignacio led design groups in multinational firms such as Sapient and IDEO, creating global solutions for companies such as Xerox, Polaroid, Fila and IBM.

Ignacio Germade has received several design awards, such as the IDSA Design Excellence Award, ID Interactive Media Awards and ID Magazine Awards. His work has been exhibited in Boston, London, and Hong Kong.

He studied design in Spain and the UK and has taught at leading design schools including the Rhode Island School of Design, the Massachusetts' Art Institute and the Art Institute of Boston.

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**Innovation is necessary but not the only factor to ensure the success of a design. Great products and services need to be created that satisfy people's desires. We need to know what people want and to set up interdisciplinary teams that ensure the operation is successful.**

Looking at the role that design plays is very important in any company. Some of the questions we've been considering at Motorola are: how can design help change the focus of a company from being technology driven to being user driven? How we can use design to drive innovation?

Everybody is talking about innovation; innovation is rapidly becoming a buzz word. As with any other buzzword, the problem with this is that we run the risk of forgetting its real meaning and turning it into just another marketing spin. (One could argue that the same thing is happening with 'User Experience'). I often hear people saying things like 'innovation is the most important goal for a company'. I believe this is a mistake. Innovation should not be the goal but part of the process we use to achieve the goal. The real goal is to create great products or services, and great products and services can only be achieved by understanding the people you are creating them for. Occasionally it is necessary to re-examine your primary aims

to ensure they address your customers' need.

This may sound like a semantic problem but there is actually a very important distinction to be made. If the goal of a company is to achieve technological innovation, large amounts of money can be spent following the wrong path. If the goal is to create great products, products that fulfil the needs of the people that will use them, then we shift our emphasis to creating a better understanding of these people. You have to know what makes sense to them and what their needs are. Then and only then you should look for the technologies that will allow you to achieve those goals. Simply put, innovation is the process that allows you to fill the space between the product you *can* create and the products you want to *create*: the products that people will love.

In the past, Motorola was a prime example of a company too focused on technology. We have a heritage of techno-

logical innovation, having created the first mobile phone, the first shell phone and so on. Despite this, innovation only gave us the advantage for so long. The reason Motorola is a convincing brand today is because we are using design to drive innovation and deliver products that resonate with people. Technology is still an extremely important part of our company, but we have created a symbiotic partnership between technology and design. I often describe this like a dance; in the past technology was the lead partner but now design has stepped into that role.

RAZR is a good example of Motorola's new approach. RAZR contains plenty of technological innovations but the real aim of the product, however, was to achieve specific proportions and qualities. We really had to push the technological boundaries to accomplish what we needed. Some of the materials we used had never been used before on a phone, including magnesium, aluminium and glass. For example, to achieve the desired thickness, the keypad had to be one third of the size of a traditional one. To make this possible we had to completely re-engineer how a keypad is put together. RAZR's keypad uses a single piece of metal with cuts on it to allow it to bend and activate the keys. This solution did not merely give us the right size but also provided us with one of the 'signature' elements of the design.

So how does design help transform technological advantage into success in the market? Why should design be playing this role? This can be broken down into four key arguments:

The first is that design is an excellent medium for discovering opportunities. Specific design processes such as Ethnography help us understand what is socially acceptable, including how people interact with products and services. In other words, what is meaningful. This type of research is very different from traditional Market Research studies. Successful product design should recognise the importance of speaking directly to people from diverse cultural

and economic backgrounds so that it can relate to them in their own terms. The main objective is to create empathy, to connect with users at a deeper, intuitive level.

Paul Farmer, an accomplished medical doctor and ethnographer, said that "*ethnography concerns itself more with meaning than with information*". Unlike other types of research, the main function of Ethnography is not to validate something but to create connections and empathy with the user. One of the things that has profoundly affected me as a designer was participating in ethnographic research, seeing an elderly lady struggling with a piece of technology that you thought was simple to use created a sense of appreciation that altered the way I think about design. This understanding makes you care about other people and therefore, the products you create for them. It is important to realise that the products we design form part of a conversation with the user. If you don't listen to the other person, if you don't care about the other person, the conversation rapidly turns into a monologue and monologues are only interesting for the person doing the talking.

Secondly, design is good at facilitating collaboration. Collaboration is fundamental to a successful product. Design can help support a meaningful dialogue between product managers, engineers and design team members. This helps reveal additional elements of the design story that will be further developed later in the process. Designers take these components and create a story with them. For example, they use research findings to help map potential opportunities. The process of design is not dissimilar to the process of creating a story. You have to put it into context, address a particular audience and link different components together to form a coherent whole. Designers take the different elements of the story, which may not provide us with much meaning when viewed in isolation, and translate them into a physical narrative. This means that everyone in the team can visualise and embrace the product story.

Thirdly, design is good at prototyping propositions. Knowing how to quickly turn these stories into physical or digital prototypes allows you to get iterative feedback. Mistakes should be made early on, but you should learn from them even faster. This helps manage risk and ensures that you are investing in the right solution. At Motorola we use techniques such as Perceived Quality research which helps us understand what makes people tick. This has nothing to do with the beauty contest approach, where a group of products are shown to a focus group to help decide on a particular design, and everything to do with understanding how people react to things, such as the right density of a product, i.e. the weight compared to the volume, which goes some way to affecting perceived quality.

Finally, your products and your services are your brand. Some companies approach branding from the outside in, defining a brand communication strategy and hoping the products will follow it. This is like choosing the icing for a cake and thinking about what should go inside afterwards. This may work with soda water but I do not think it works for consumer products. If you look at product design as branding from the *inside out*, then you have to grasp the story your product is telling and how it relates to the stories told by the rest of your portfolio.

It's interesting to note that PEBL and RAZR are both concept names used by the designers. Our marketing then took these names and explored them as a way to communicate the story (and I think they have done a great job). But the reason why Motorola is stronger now than it has been in many years is because of the cake. The products we are creating are telling an interesting story by themselves. A story that people can read and are interested in.

In summary, what I would like to convey is that designers need to be aware of the type of role they can play in transforming a company. Design can facilitate a coherent forum with technology, business and users to facilitate

innovation. As designers we have a fantastic opportunity to make a big difference.

According to *Business Week* "design is to the 21st century what marketing used to be at the end of the last one". I am sure the companies that embrace design will be the ones leading the marketplace in the future.