

# Collaborate to Innovate? Getting Fresh Small Company Thinking into Big Company Innovation

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Inspired by Lego's pioneering explorations into co-design—Cuusoo—the “openness” zeitgeist, and several of our own ad hoc co-design initiatives, Vodafone decided to probe more systematically into the possibilities of actively co-designing with our customers. Like in all great adventures, we set out with certain expectations but came out with a lot more to think about than we had anticipated. Rather than focusing on the outcome of this work, I will describe the lessons learned from the journey. Although we ultimately co-designed some great ideas for products and services, it was the journey and associated discoveries that were particularly instructive.

Much current sentiment advocates co-design as a human, fashionable, and possibly ideologically appropriate process for contemporary brands to engage with. But these are not strong arguments for a company to justify changing its innovation processes. So our own co-design experiences needed to establish something more rigorous, more tangible, and positively differentiated if we were to bring the discussion into the business in a meaningful way.

Our co-design program had a sense of the informal social experiment about it. We manipulated some variables by design, ran a few loose controls, and fixed stuff on the fly that didn't seem to be working. We didn't intend for our analysis to be founded on anything other than qualitative observation, but this in itself provided clear and unexpected findings.

The broad aim of our co-design initiative was to explore the potential of co-design to give Vodafone insights into new ways to create innovative, differentiated, and compelling future service and product concepts through ideation, design, and prototyping directly with our customers.

## Cultural Challenges

There are quite a few co-design examples in industry. Companies such as Muji, Procter & Gamble, Shell, BMW, and Lego have all effectively implemented some form of co-design strategy over several years. Such has been the value of co-design to Lego that it has now been implemented as the core of the company's product definition and development process. Nonetheless, for most companies co-design is new

territory; the idea of “opening up” can be worrying, and most companies hesitate to share ideas and strategies with people they don't employ. But the promise of new products, new and profitable ventures, new ways of thinking, and new energy is an attractive prize.

If the goal is to make a difference, it may be helpful to think of co-design as a program of change and not simply a tool. In fact, Lego's experience with co-design has been so positive that it has decided to blur the line between its customers and its company and has started to describe itself as transforming from a corporation into an eco-system [1]. Of course, the extent to which any company will embrace such a change will depend upon many factors, one of which being the value that co-design can be shown to offer. This won't happen overnight, and Lego has a very apposite slogan: “Everything big starts small.”

We found that while co-design can offer large companies the advantage by creating contemporary, highly relevant product and service concepts, there are hurdles. The highest of these is knowing how to capitalize/exploit/

[1] Lego Group. Personal Communication, 03.06.09 with author



leverage the pile of shiny new ideas that are brought back from co-design. Creating good ideas isn't enough; it's about driving a new innovation route into the business.

### **Creating Co-design Incubators**

We wanted to see whether we could create co-design “incubators” in which concepts could be hot-housed to a useful level of maturity—one where a professional design team could take away the product and work with it to create service and product prototypes.

We organized our co-design team as a “club of experts” [2], and we rejected other models such as crowd-sourced, community-based, or coalition-based. Thanks to discussions we held with other co-designing organizations, we learned the chemistry between participants would be the key to success in this type of organization, the individuals would need to be motivated, innovative thinkers, and we would need to actively manage the co-design teams and be open with them.

We ran the co-design sessions with both studio collaborators (people in the same design studio) and remote collaborators (connected people at home linked to the studio using various tools). We wanted to understand those aspects of co-design that would allow the team to generate lots of great ideas, yet ensure people wanted to come back for the next session.

### **What We Learned**

#### **...about team organization**

*Find the right group size. We maintained a stable working-*

group size of around 16 collaborators, divided into four groups of four. In each session, four of the participants were remote workers, sometimes working as a remote collective or sometimes as part of a studio-based team. The ratio of customers to co-workers was always around 1:1. Our experiences with this group size are supported by Lego's findings that suggest that groups of around 12 to 15 are the most productive, while groups become unmanageable when they exceed 16 participants.

*Maintain a core group.*

Throughout the sessions, we maintained a core group of participants but allowed around 20 percent churn between each session. We noticed a marked development of skill, understanding, and team spirit over the period.

*Keep balance between numbers and group dynamics.* We found that dividing the group into small teams of four generally worked well. But we noticed that some teams became very comfortable with each other over time, reducing the overall energy of the group (although they could still be productive). We reduced teams to two (a pair of collaborators), which successfully resolved this issue. However, as a consequence we found that there was an associated risk that if the collaborators didn't click, their productivity and the quality of their output diminished.

**...about running the sessions**

*Keep the buzz.* In the most productive co-design teams, collaborators got along and the chemistry worked. Getting this

right makes the process easier to manage, but we found no magic formula. Instead we used instinct and observation and tinkered with the team membership if something seemed to be going wrong.

We found that introducing friendly competition between teams and developing realistic personas added a sense of purpose, energy, and flow to the sessions. The small prizes that were awarded to the winning team (Amazon.com vouchers) added only a slight edge, as the participants readily engaged with (and enjoyed) the spirit of competition. An "X-factor"-style reveal of the winners introduced positive tension into the session that resulted in each session ending on a high. Collaborators reported that the competition element of the process was very positive. We found it very important that success criteria, or the rules of judging, were clearly defined throughout.

*Keep it focused.* We were initially reluctant to set tasks, provide constraints, or share information with our customer collaborators as if they were employees. But we quickly learned to treat them as a project team that not only needed planning, support, and reporting throughout but that also needed appropriate resources and information. They also needed to understand the real project objectives and the business and technology constraints they were working within.

*Don't overfacilitate.* We initially allocated a facilitator to each team of four but found this encouraged team members to

sit back and let the facilitator do the work. The facilitator's role also seemed to drive the solutions, making the team members less accountable for the session outcome. In subsequent sessions, we removed facilitators and encouraged the teams to self-organize around clear objectives with precise time boundaries. The facilitators then took a central role more akin to roaming project managers.

**...about designing with non-designers**

*Customers aren't design professionals.* We knew our group were not designers, but we found we easily slipped into making unrealistic assumptions about what they would bring to co-design sessions. We had to relearn that our customers are not (necessarily) design professionals and what they bring of value is their inherent customer-ness. This was something we wanted to keep and encourage.

*Keep it visual.* We initially designed sessions that were based on discussion and debate. In this sense communication was primarily verbal and ideas were largely represented by text and system-like diagrams. This, however, favored those who were verbally skilled, which tended to stilt the overall flow and energy of the session. We reformatted sessions, making the primary medium of communication visual rather than verbal by using tasks that encouraged visual representation (personas, ideas as pictures, and products/services as storyboards). Not only did this allow us to draw the most from

[2] Fronteer Strategy: Co-Creation 5 Guiding Principles; <http://tinyurl.com/c5rp7v/>

our collaborators, but it also created a more accessible working environment and effective stimulus for communication.

*Support the skills gaps.* We were confronted by the fact that structured design thinking and visual communication skills are often taken for granted by designers. At the same time, we realized these are skills our customers do not necessarily have, so we equipped each collaboration team with a trained visual communicator. This worked well, enabling higher-quality deliverables and better communication between teams.

*Provide the same resources you'd expect to do the job.* After our first co-design session, we realized that our collaborators didn't seem to be emotionally engaged with the product concepts they had defined; in fact the process had seemed like more of an intellectual exercise. On reflection, we realized that we hadn't provided personas for the services, implicitly expecting customers to design for themselves. We introduced persona creation to the sessions, which was effective in building emotional engagement and focus with the design activity.

*Use the brand to focus the session.* We decided to introduce the Vodafone brand as a design consideration in the third session; up to this point we had presented ourselves simply as a large telecom company. Insights from an earlier project showed that (at worst) this was likely to have a marginal effect, although we hoped for a more positive outcome. In fact we found that introducing

our brand had a very positive impact, and our collaborators reported becoming more highly motivated. They told us that the presence of the brand made the task feel real and valuable, that the process no longer felt academic as it became evident that the designs might actually be built.

#### **...about remote co-design teams**

*Remote social dynamics.* Throughout the sessions an online team of four people worked on the same tasks and challenges as the studio team. Initially we allocated a single remote team member to each studio group and discovered that the studio teams really needed to "adopt" the remote members, as they wouldn't actively contribute unless they felt included. In our sessions a member of the studio team adopted a remote member by ensuring that the remote member's webcam could "see" and "hear" visual stimulus materials and people talking/presenting in the studio, etc. It was interesting and slightly surreal to watch the adopter walk around the studio holding the laptop displaying the face of the adoptee, pointing it (and the laptop webcam) toward visual and auditory sources.

Later we formed the remote workers into a single team and noticed some interesting social dynamics. In several instances, we found that a dominant and directive team member tried to drive and organize the rest of the remote team. This was counterproductive, as other team members contributed and communicated less and less as the session continued. We

chose to intervene to resolve this and instructed the team to use text (via Instant Messenger) instead of voice to communicate with each other. This effectively changed the dynamic; flattening communication allowed a more egalitarian, inclusive, and efficient dialogue to emerge. Members could no longer use verbal inflections, tone, volume, or interruptions to dominate. As in studio teams, it is important that no one person drives a team to the detriment of others, and all members are given the opportunity to contribute.

*Remote communication.* To start, the remote team would communicate verbally, through a facilitator nominated as their communicator. This led to some frustration, as the competitive nature of the sessions made it important for the teams to communicate their thinking effectively, passionately, and persuasively, something that a disinterested studio communicator didn't bring. In time, we dedicated a communicator to the remote team to help explain tasks, access visual material, and take the role of visual communicator, while letting the remote team present their own ideas to the group.

We noted that when using text to communicate with each other, the online group had an advantage because they could review their conversational histories, as could their facilitator who often needed to catch up with their discussions to understand what was going on.

We found it important to provide sufficient "presence" tools so that the remote teams had a sufficiently large presence to be

able to interrupt and force their opinions into discussions taking place in the studio.

*Remote collaboration.* We noted that the richer the technologies we gave the remote team, the more they could effectively communicate their ideas (as long as the technologies worked in close to real time). At its most technologically mature, our remote team used a set of tools comprising a shared online digital whiteboard (Twiddla), Skype, an IM application, and webcams. However, bandwidth issues meant that this combination was very slow. Furthermore, these tools were difficult to set up and recover when they failed. In later sessions, we chose to drop the whiteboard to free up bandwidth for the other tools.

We also found that remote workers could contribute only at the speed of their personal technologies. Our remote participants were distributed throughout Europe, and bandwidth and service levels varied. We discovered that in a remote distributed team, progress takes place at the speed of the technologically weakest member.

#### **...about the co-design sweet spot**

We were interested to know whether certain design activities lent themselves more readily to co-design than others. So, in each session we systematically moved our co-design window from ideation through to design communication (e.g., storyboard).

We achieved this by setting up an online environment for generating and sharing ideas, and designating earlier and

earlier phases of design as pre-session work for the group.

The design activities of interest to us were those usually undertaken before and during concept development. We gave downstream activities such as detailed functional and visual design to a team of professional designers who worked with us to create prototypes of selected co-design outputs.

As we shifted the focus of each studio session further downstream toward concept visualization and communication, we found the output to be more useful and actionable and to require less effort from our professional design team to turn into prototypes.

However, as we progressed through the sessions, our core team of collaborators also became more competent. It is difficult to clearly disassociate which of these two factors (competency or design activity) contributed more to the better outcomes—we suspect both were important.

#### **What Did We Take Away?**

We found that the concept of a co-design incubator as a means to fast-track or hot-house ideation to a point where concepts can be handed over to a professional design team can work. We haven't addressed the quality or the specific outcome of the sessions in this piece. However, we believe the concepts we generated are probably better nuanced, fresher, and more relevant and certainly developed more rapidly than would have been possible using an in-house team.

We believe that while the lessons we have reported con-

cerning team and session organization reflect variants of best practice in workshop design, they are particularly pertinent to co-design with customers.

The lessons we learned about designing with non-designers, managing remote co-design teams, and about the co-design sweet spot weren't anticipated and we believe haven't been reported elsewhere. These will be of real practical value to us in planning future co-design.

From a wider perspective, the accelerated approach we have described compliments Web-centric businesses and may well provide a useful model for bigger companies who want to inject fresh, grassroots, small-company thinking into their innovation processes. But to do so, this inspiration feed must merge with the company's innovation processes—which in itself can be a challenge given the source of that inspiration can feel like it comes literally out of the blue for those inside the organization.



#### **ABOUT THE AUTHOR**

Mark Hicks is an experience design professional who has been immersed in digital product design for over 20 years. A BPS chartered psychologist, he has divided his time fairly equally between the performance critical human factors fields and the online and mobile experience design world. Intrigued by the way people, business and technology fit together he enjoys unravelling complexity. For the past 10 years Hicks has focused on digital product design and strategy with large corporates, SME's and agencies. He is currently working as a design expert with Vodafone's Internet Services division in London.