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DESIGN +

*Organizational renewal and innovation
through design*

The products, services, technologies, ecosystems, and networks of today are much more interconnected and complicated than ever before. As a result, private and public organizations alike are turning to design to find new ways to create value, manage uncertainty and innovate in a sustainable manner. Design can play a variety of roles on different levels in organizations, with different effects. The Design+ book offers an overview on how design and design thinking can change our organizations, drawing from academic research and company experiences in different industries. We showcase different perspectives and approaches, and hope to inspire you to explore the opportunities through which design can help to renew your own ways of working.

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Increasing customer collaboration through co-creation

Senni Kirjavainen, Aalto University

Matti Luukkonen, Outotec

Collaboration with customers and users is essential in order to develop services or products that answer their needs. Introducing co-creation workshops to the beginning phases of product development can help to build long-lasting benefits in customer relations and understanding, as well as spark wider change efforts internally.

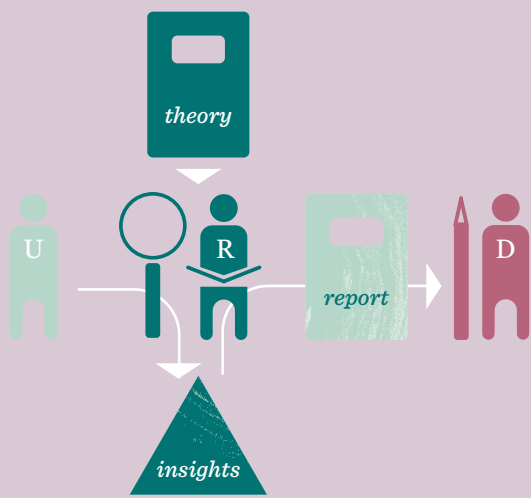


In the last ten years, design thinking has established its role in design led industries. It has also gained a foothold in companies that traditionally have not systematically exploited design methods or are heavily business or technology driven. A central concept to design thinking and its human-centered approach is collaboration in all phases of a design process from the very start. In addition to having user-driven criteria in the center of everything, co-creation helps in getting to the heart of the problems that are often impossible for the user to identify and explicate¹. The reason organizations should embrace co-creation is simple: engaging customers to defining and creating the products and services that bring value to them can lead to competitive advantage². Co-creation is not merely collaboration, but engaging stakeholders with diverse expertise and experiences broadly to find solutions that could not be otherwise found³. It is not limited to creating products, but can rather refer to any collective creative action and be applied to pretty much any domain of life⁴.

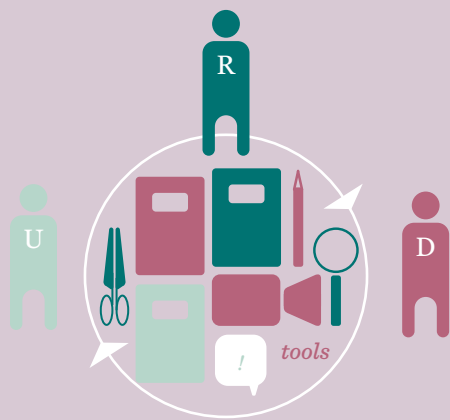
Co-creation can be summarized as having three basic elements: collaboration, development action and creating something, while the tackled issue could be anything⁵. Compared to plain old collaboration, co-creation always includes development action and creating results, and the settings are more symmetrical with all stakeholders as active contributors towards mutual goals⁵. Co-creation moves the focus from managerially led value creation to enabling collaboration to create insights and make meaning in an equal setting⁶. This approach allows businesses to develop solutions that are not based on assumptions of the customers' and users' needs, but instead on solutions that are founded on mutually recognized needs and ideas. Diversity in design teams has been shown to improve the quality of solutions, and involving a wide range of employees to idea generation helps in committing them to solutions¹. Thus, it is not only the quality of solutions such as products and processes that we should pay attention to, but the quality of the co-creation experience also matters. When the co-creation process is well thought out, the participants can have a valuable co-creation experience where the boundaries of organizations are blurred².

Meaning cannot be created alone⁶. Co-creation can be used for any creative action done in collaboration, including creating clearer and more detailed visions for the future than what would otherwise be possible³, interpreting experiences⁶, and setting a foundation for further collaboration. Customers, users and other stakeholders should be included in development actions early for testing ideas and shaping the markets. Through co-creation this shaping can be bidirectional, as customers shape the direction of a project while businesses can prepare their customers for new ideas. Having co-created these visions positively affects their probability of implementation³.

Classical:



Co-creation:



The differences of the roles user [U], researcher [R] and designer [D] have in a classical design process versus as a part of co-creating (adapted from Sanders & Stappers⁴)

CO-CREATING TO ESTABLISH RELATIONSHIPS FOR LONG TERM COLLABORATION

There are as many ways to co-create as there are people and companies doing it. For Outotec (a large minerals and metals processing and technology company), one form of co-creation has been the introduction of co-creation workshops to their service offering. These workshops have been piloted with key customers and further developed based on the learnings from the first trials. Co-creation in these efforts means getting to the core of customers' problems and solving those by either coming up with solutions from the existing product portfolio or creating novel products and services. The need for this type of working was called for not only by Outotec's customers, but also product developers in the company, who recognized a growing need to understand the problems their customers are facing in their processes, the need to reveal the real issues behind those problems, and to desire to generate ideas that address those issues. In order to offer the cutting-edge technological solutions their customers expect, and to remain a forerunner in their industry, the product developers at Outotec had to think of ways to bring their operations closer to customers. Involving the customers early in product development by co-creating with them was one logical answer to this need. This started a change that has been extensive and comprehensive.

After some initial coaching on design thinking from Matti (who works as an in-house industrial designer at Outotec), developing practices for co-creation has been a natural continuum to the introduction of design thinking tools inside the organization, making it easier to serve their customers through creating deep understanding. Dedicating time for co-creation workshops also crafts time for coming together to create that understanding and use it as a base for generating new ideas. The workshops also serve as a platform for deepening trusting relationships between stakeholders and a foundation for fruitful collaboration.

Foundations for co-creation

Based on these initial experiences, there are three elements that make a good co-creation workshop:

- First, *account managers* play an important role with their understanding of the local context and relationship with the customer. In addition to bringing the cultural context to the table, they have the knowledge of previous collaboration and personal contacts in the customer company. These personal relationships enable mutual trust, identifying the right partners for co-creation and finally getting the right people in the customer organization to take part in the collaboration. Similarly, it is also important for the account managers to have internal contacts to be able to gather the right group of Outotec employees with matching know-how to each workshop.
- Second, a *champion in the customer organization* is needed. In all co-creation workshops, there has been someone in the collaborating organization who wants to push collaboration further and works together with the account managers to organize opportunities for co-creation.
- Third, the *customer's needs and co-created future visions serve as a starting point* for successful collaboration. They also put emphasis on reinforcing the experience of mutual benefit, as the collaboration has to give something to both sides.

The workshops have already been conducted around a variety of challenges. Teams from Outotec and the client have spent a couple of days working together near the customer's site and using that time to work intensively to recognize bottlenecks in the customer's processes, map possibilities for collaboration and figure out ways in which Outotec

could solve the recognized issues. In the end, they have produced a roadmap offering an overview of what the next steps of collaboration will be, when those should be taken, what kind of deliverables will be produced, and what enabling actions are needed in order to realize the plans. The participating team has co-created quick demos of how recognized problems could be solved, as well as quick prototypes of new ways of providing solutions to customers' problems, including for example digital services.

By organizing these workshops in fast cycles, a lot of learning has happened and the workshops have been fine-tuned to a more effective and useful direction. One of the biggest lessons had been the understanding that the ways of co-creating and doing creative collaboration cannot be the same in all cultural and customer contexts.

After piloting the workshops, co-creation is now a part of the company's service offering and the workshops have an established role in collaboration between Outotec and its customers. Despite this established role, there is still room for developing the practices further. To take co-creation to a more strategic level, customer relationships are to be developed to widen the scope of applying co-creation as a method for collaboration. Immaterial property rights and practices regarding IP pose an interesting challenge to be solved, as IP plays an important role in the industry Outotec operates in. To be able to create solutions together with customers, clear contracts need to be made regarding rights ownership and what the collaborating parties can expect from the results. This clarity improves the trust between participants in co-creation, creates a feeling of safety, and therefore contributes to the results of the workshops.

Seeing the impact of co-creation

The co-creation workshops Outotec has organized have had a positive impact on multiple levels, and the feedback and experiences have been rewarding beyond the direct workshop outputs. The most important aspect of co-creation, it seems, is the *bond and relationship between the collaborators*, that creates huge potential for future development efforts. Other benefits include:

- forming a good *overall view* on the customers' problems and needs, which later helps in setting guidelines for product development. This kind of insight spanning across business units might not be otherwise created. Forming an overall view might even help in productizing technologies that, with a sustainable level of customization, serve as many customers as possible - a big advantage in Outotec's industry, where products are traditionally highly customized. Co-creation enables this kind of collaborative visioning, and eventually the visions are what convinces people on new directions and possibilities to be pursued. The improved overall view also allows Outotec to match customers' tacit issues to existing products.
- increased *future investment decisions* when customers have been given the opportunity to influence the development of solutions. The process of trade can also change, as the co-created roadmap serves as a basis for making an extensive offer that tackles a variety of mutually recognized needs and problems.
- *qualitative affirmation* for introducing design thinking and user centricity internally. Some customers have stated that the co-creation workshops have been the best workshop they have ever participated in, which gives a strong mandate to push this kind of collaboration further as a strategic change. Being able to produce

qualitative data on the impact of alternative ways of doing product development is a welcomed outcome, as co-creation workshops also represent an optional way of going about the first phases of the existing stage-gate-model to development. It is easier to promote change and get people in the organization to side with it when there are positive testimonials and not only numeric data on e.g. profit.

- *understanding further opportunities* opened up through co-creative ways of working has been one of the biggest lessons that has been gained from the co-creation workshops. These include trusting relationship with customers, new innovative ideas, better usability and novel, high quality technological solutions, to name a few benefits. The understanding of possibilities for collaboration has increased with the understanding of customers' and users' needs, nudging attitudes and the company culture when it comes to experimenting as well as co-creation. Even those who have been skeptical towards co-creation and its methods have taken initiative to take it to other parts of the organization. There are now efforts for enhancing user centricity in company-wide processes and systems and a growing demand for UX as developers want to focus more and more on the users. We attribute this shift to people having seen first-hand what the benefits of collaboration are and how it pays back to e.g. sketch together while talking about ideas and possibilities.

Tips on implementing co-creation

One of the most important tips to others who would like to apply co-creation is to be bold in trying something new. There are multiple references from other companies that offer insights on what might work and what might be better suited for other kinds of collaboration or technological contexts, and you may also find internal know-how from the company's own employees. Learning a new approach and ways of co-creating benefit the company not only during the actual collaboration, but also in the long run. Facilitating co-creation with the help of internal rather than external workforce, tacit knowledge and know-how is accumulated in the organization and relationships with the customer deepen. This kind of collaboration can be recommended to any organization in order to survive and flourish in the competitive global market. Products, in the end, are quite easily copied, unlike the knowledge and understanding behind that technology. Enhanced understanding is a resource that can be turned to value over and over again.

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Three rules of thumb:

1]

Be bold and go ahead!

2]

Look for references, and don't hesitate
to piggyback on others' learnings.

3]

Do it yourself for long-term benefits!

“When you execute co-creation workshops yourself together with the customer, knowledge and understanding of the customer are developed and doesn't only stay in reports. You get a lot of material that consultants would not document, and that is a reserve you can later draw from.”