

Danish Design Center (DDC) - Smart greater Copenhagen



source: [smart-greater-copenhagen.jpg](#)

Author: Maria Damgaard Jensen (DDC)

Case description

As Denmark's national design center, it is the Danish Design Centre's (DDC) mission to promote the use of design in business and industry to help professionalize the design industry and document, promote and brand Danish design in Denmark and abroad. Its key approach is systematic experimentation with design-based value creation in companies.

With financial support from the Ministry of Business and Growth, it is the DDC's ambition to make design one of the three most important positions of strength for Danish companies. The DDC operates in a complex environment at the intersection of business and industry, design professions, education and research institutions, and public institutions. It is the DDC's view that the task of increasing companies' use of design must be addressed through open partnerships and the use of co-creation. Therefore, the DDC aims to establish strong and innovative partnerships with relevant stakeholders, both in Denmark and abroad.

The DDC's mission is reflected in a number of platforms with different strategic focus areas. The platforms serve as the basis of the DDC's development and scaling of initiatives and programmes. This analysis will address the Smart Greater Copenhagen programme, which exemplifies the work methods and tools used by the DDC. This programme makes a good

case because of its aim to create a design-driven strategy through co-creation processes between actors from both the private and public sector.

Recently, the DDC and other national architecture and design organizations moved into BLOX, Realdania's new building complex in the heart of Copenhagen, as a part of the government's growth plan for design. BLOX too aims to strengthen the cooperation between different actors, such as companies and designers.

Context

In 1978, The DDC was established by the Design Council as a national knowledge center for design. Its purpose was to make use of the potential that design can bring to businesses. Therefore, the DDC initially focused on design as a means of boosting exports and turnover in Danish business and industry. In 1979, the DDC moved into Industriens Hus which is the home of the Confederation of Danish Industries. At this point, the emphasis was on industrial design, and design was mainly promoted in the form of objects designed for industrial production with function and aesthetics as the key parameters. Design quickly became a political subject, as the methods could be used not only to strengthen industry and its efforts to develop and market products, but also as a means of improving the production and development of Danish society. This created an incentive for the Ministry of Business and Growth to enter the design industry and make a policy for design. The idea was to make a policy that included goals such as: 1) educating and developing the next generation of creators in industry and society, 2) creating high quality public design, 3) attracting knowledge and developing skills in future growth areas, and 4) maintaining and developing Denmark's international image in the design field. Thus, since the late 1980's, the DDC has operated as an independent organization under the Ministry of Business and Growth, with the aim of spreading the use of design in business and public institutions. For nearly 30 years, the DDC has received an annual budget via the Finance Act.

In 2000, the DDC, along with the rest of the world, began to shift its focus towards the design process itself, making design thinking a key term. This led to an expanded concept of design that also includes systems design, service design and co-creation. The DDC now works to promote design thinking in business, industry, and the public sector. The idea is to use design thinking as a driver and a source of innovation. The DDC promotes this ideal through courses and models, including 360 degrees, DesignBoost, DIN model etc.

Today, the DDC works to empower businesses, people and society to "shape the next": to design the future we want to live in, whether it will be the health sector, business models or technologies of the future. We have seen the big difference design can make for private, as well as public, institutions. However, there is still a gap between the existing potential and how design is actually used. And it is in the interest of the whole community to make use of the existing potential. The DDC will do this by activating designers' methods and mindset to create new value for companies, people and society. This means providing them with design experiences, tools and skills that enable them to address challenges and capture new opportunities. Especially today, with the planet facing great challenges, it is essential to think differently in order to secure sustainable solutions. Doing so will require a joint effort, and design methods can be used to stimulate co-creation processes to rethink issues such as

production chains and lifestyle patterns. Thus, over the past three years, the DDC has focused on solving these challenges by facilitating experimental initiatives on different levels in society, introducing design thinking in areas such as digitization, production, health, environment, urban development and more.

Organization

Name of the Policy Lab: The Danish Design Centre

Contact person: Christian Bason

Professional position and organization : CEO, Danish Design Centre Contact email: chb@ddc.dk

Webpage: danskdesigncenter.dk/en

Country: Denmark

The DDC is located at the intersection of the broad business community, designers, and public institutions in areas such as business, innovation, culture, internationalization, etc. Thus, the DDC has a unique opportunity to create value (economic, social, environmental) for these target groups by creating new, effective collaborations between them with design as the driving force.

DDC's mission is to activate the designers' methods and mindset to create new value for companies, people and society. The DDC's ambition is to contribute positively to the massive transformation our society, including companies and institutions, is in the middle of. Its vision is to "shape the next".

For companies, cooperation with the DDC must, first and foremost, lead to business development, transformation and increased growth. For the designers, the DDC must open new market opportunities. For politicians and authorities, the DDC must provide new, concrete and data-based knowledge about how design can create innovation and value. In all cases, co-creation can be used as a key factor to achieve goals.

The DDC focuses on areas in which the potential for creating value through design is particularly large. Currently, the DDC has organized its work within five professional action areas with great challenges that the DDC seeks to solve, or with potentials that the DDC will contribute to meet. The strategic platforms are:

1. Next Business: The mission is to incorporate the Danish design DNA in companies in order to create new business models and new interactions between businesses, people and society
2. Design Startup: The mission is, with the Danish design DNA as the driving force, to gather, strengthen and develop the Danish startup ecosystem, allowing startups to grow at larger speed.
3. Design Resource: The mission is to make Denmark the world's leading hub for design resources.
4. Cities: The mission is to ensure that the cities of the future are designed with a sustainable and people-first approach.

5. Future Health: The mission is to create spaces in which companies and public organizations can shape the future healthcare solutions together.

DDC works to create the best conditions for businesses, stakeholders and designers to shape and create the future. Therefore, it makes the future tangible and concrete through design methods by working to transform the various focal areas to meet complex challenges, e.g. in healthcare, demographic development and the use of resources now and in the future.

DDC aims to trigger the innovation potential found in the interaction between private companies and public organizations, and putting technology in play to create valuable and meaningful experiences for citizens. To do so, DDC engages and empowers companies, public organizations and designers through five types of services:

1. Futures - We are watching the horizon. The DDC identifies the latest national and international trends in design, digital transformation and more, and communicates and translates them into usable knowledge and ambitious initiatives
2. Academy - We share learnings. In collaboration with national and international teaching, the DDC trains managers in design methods and approaches
3. Transformation - We create change. The DDC develops, facilitates and drives ambitious projects, programmes and initiatives where design methods and approaches are used to develop products, services and business models
4. Branding - We profile Danish design here and abroad. The DDC brands Danish design by communicating both national and international successful design cases
5. Policy - We provide the right framework conditions. The DDC advises the Ministry of Business and Growth and other authorities on design and innovation policy, based on trends, analyses and data from projects

The DDC is a private limited company owned by Design Society. Design Society was established by the DDC together with the Ministry of Business and Growth and the DDC's two sister companies, INDEX: Design to Improve Life and the Danish Fashion Institute, in order to build an effective and unifying national entity with the necessary knowledge to act as a qualified advisor on the development and implementation of efforts to promote the growth of design in Denmark. In this sense, Design Society acts as the parent company for the three companies which, however, act according to their own vision and mission, and have their own board. Since 2017, Design Society has received grants from the Finance Act. It is Design Society's role to channel the state funds to its daughter companies, but it does not have anything to do with deciding the content of their strategy (Figure 11). Before Design Society, the DDC received grants directly from the Finance Act. The rest of DDC's budget comes from projects, workshops and lectures.



Figure 1 - The DDC governance model

The DDC reports to a board that actively contribute to DDC's mission on the basis of their specific personal qualifications and experience from the private sector and the design industry. The board determines the direction and content of the work carried out in DDC and it is responsive to the Ministry's views on growth in the creative sector, innovation and digitization etc., since the Ministry grants financial support to the DDC. Thus, for each year a performance act is prepared, which the DDC must live up to. The day-to-day management is handled by the CEO. In addition, the DDC has an international advisory board that contributes with outlook, input and inspiration for the DDC's work, as well identifying new opportunities for Danish design to create value.

The DDC builds its activities on a mix of various skills. Employees are not hired to fit into a specific profile. Instead, the DDC look strategically on how it can achieve the best possible variety of people with different educational backgrounds and skills. In other words, one employee can cover several skills and needs:

- **Business:** In order to make design relevant to companies, it is crucial to understand their corporate governance, organization, strategy, economy and business development. This involves insight into starting and running a business, including business economics, business models, management, organization, etc.
 - **Design:** To be a credible organization, the DDC must have a deep insight of Danish design: its history and "DNA" (what makes Danish design unique), design methods, design trends as well as the design industry and its actors. The DDC must also look beyond national borders for inspiration and strong international relations.
 - **Communication:** Communication is a fixed part of the work in the DDC. Therefore, it is important that the organization can communicate with its different target groups and can handle all relevant communication channels, especially the digital ones.
 - **Technology:** In all of the DDC's activities there is a strong focus on technology and digitalization, and how design can be used to integrate the best technological trends in products, services and systems. Therefore, it is necessary that the DDC have an understanding of the field, including insight into advanced production, information

and data visualization, open data, etc. The DDC must always be aware of what is happening on the front line of technology.

- Social research: A great insight into social science and humanistic methods, including collection of data, interview techniques and quantitative/qualitative analysis, is required in order to collect and communicate learnings from the activities initiated by the DDC. The DDC draws on disciplines such as anthropology, ethnography, cultural science, sociology and economics.
- Policy: The DDC is tied especially to the business and innovation policy agenda. In addition, many of the DDC's activities involve a close interaction with various public actors. This requires great knowledge about public organizations as well as insight into political decision-making and policy development. At the same time, the DDC must be able to shape the development of design as a central element of business and innovation policy and advise other business promoters on the value of using design in the market as well as in its own organization.

The overall strategy for the DDC is defined by the CEO, Christian Bason, in collaboration with the company's board and with input from the international advisory board. The CEO runs the DDC's business development and provides close professional sparring with those responsible for the organization's business areas. The CEO creates and develops contact at strategic level to the DDC's stakeholders and sponsors and ensures close cooperation between the organization and the board. The CEO is the link to the sister organizations in the Design Society.

The DDC's COO, Sune Knudsen, develops, coaches and creates space for the development of the DDC's Programme Directors. The Deputy Director is responsible for running the DDC's strategy work. The Deputy Director ensures that the DDC has the right teams and tools to realize the organization's strategy and projects, including ongoing project and portfolio management. The Deputy Director is also responsible for external relations, including covering for the CEO.

The DDC's Chief Communications Officer, Katrine Hertz Mortensen, is responsible for the company's communication and branding strategy. In addition, the Chief Communications Officer contributes to the strategic work of the DDC in general. The Chief Communications Officer leads, develops and coaches the DDC's communication team and advises the organization's managers and employees on communication and press issues.

The DDC's Chief of Staff, Anne Christine Lyder, is responsible for the management and development of the secretariat in the DDC. The Chief of Staff leads the work on learning and effect measurement of the DDC's projects and assists the management in the development of the professional organization and strategy. Finally, the Chief of Staff is responsible for the governance relations together with the strategic partners.

The DDC's Programme Directors lead the professional teams on the strategic platforms. They identify and develop new business opportunities and are responsible for complex projects. They ensure that the phases of experimentation, learning and sharing are all implemented in practice and work for anchorage and scaling of results. Finally, they manage

relationships with strategic partners, including the establishment of external funding and long-term cooperation.

The DDC's Project Managers coach, motivate and develop dynamic teams of colleagues and collaborators in DDC's projects. They develop and manage projects and secure that experiments, learning and sharing is implemented in practice. Finally, they create long-term and strong internal and external relations and partnerships. The Project Managers are supported by the Project Assistants (Figure 12).

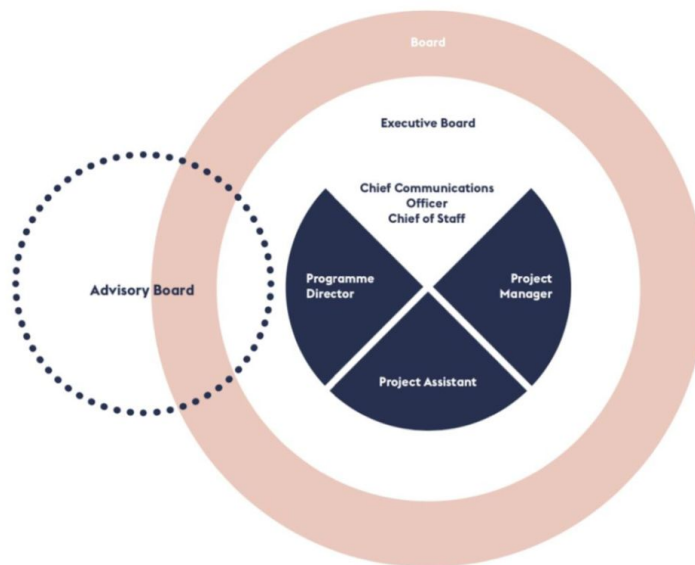


Figure 2 - The DDC organizational model

The rest of the world is rapidly discovering the potential of design, yet very few countries have as strong of a design tradition and Design DNA as Denmark. Denmark is known and admired internationally as a design society characterized as being social, sustainable, honest, holistic, quality-minded, simple, user-friendly, involving, human and attractive. The DDC wishes to support this, and so its work builds on four main values:

- Experimental: The DDC's work is design-driven. Trying and learning through practice is a key principle.
- Active: The DDC not only describes new trends and conveys knowledge generated by others but it also translates trends and new knowledge into action in the form of concrete initiatives, projects and programmes that create impact for its target groups: companies, designers, politicians and authorities.
- Involving: The DDC does not create results on its own. The DDC always develops and implements in collaboration with the relevant companies, designers, organizations and people. This co-creation approach contributes to deep involvement of customers, users, business partners and employees to develop ambitious and visionary solutions, and to ensure quick concretization and testing.

- Generous: The knowledge and experience that the DDC creates is a common good that the DDC wants to share actively with all its target groups.

SMART GREATER COPENHAGEN

The following is a description of the Smart Greater Copenhagen project that exemplifies DDC's work processes, methods and tools.

General description

With Smart Greater Copenhagen, the Capital Region of Denmark and the DDC collaborated to create an ambitious and holistic strategy to bring municipalities, citizens and companies together around a common course for the digital society of tomorrow within the area of Greater Copenhagen.

The purpose of the collaboration was to create a design-driven strategy for Smart Greater Copenhagen that points to the digital society of the future. The project should help ensure that the final strategy points to opportunities for the future digital society, putting citizens and users at the center of the digital solutions, while at the same time highlighting the business opportunities of increased digitalization. To achieve this, the Smart Greater Copenhagen brought together actors from both the private sector and public sector in a co-creation process.

Governance

The Smart Greater Copenhagen project is a political initiative from the Capital Region of Denmark. The project was initiated at the political level (top-down) and realized at a regional level. Co-creation processes took place in several stages between different actors, all contributing with expert knowledge within their specific area. All actors have at some point played an essential role and helped determine the direction of the project. The Smart Greater Copenhagen project is financed by public funds from the Capital Region of Denmark.

Stakeholder landscape

Several actors participated in the co-creation processes of Smart Greater Copenhagen, including citizens, companies and municipalities. The stakeholders were divided into four groups, each with their own focus and role in the processes. The working group and steering committee were made up of people from 10 selected municipalities in the Capital Region of Denmark and two (partly publicly funded) industry organizations – Clean and Gate 21. The project team was made up by the Capital Region of Denmark and the DDC. Finally, an expert group, consisting of experts from both the public and private sector, was established.

Underlying driving values

The actors have different interests in contributing to the project. The Capital Region of Copenhagen has an interest in creating a bigger market for tech-companies and SMEs across municipalities. The ambition with Smart Greater Copenhagen is to make it possible

for companies to deliver new, innovative solutions to more people. Therefore, it is important that all the municipalities can see themselves in the common strategy, and how the common strategy can fit into their own municipal strategy. For the Smart Greater Copenhagen strategy to be successful and efficient it must be compatible with the visions and ambitions that exist in the municipalities as the municipalities have to carry it out in everyday life.

Prior to the project's start, the Capital Region of Copenhagen invited all of its 29 municipalities to participate in the development of Smart Greater Copenhagen. In this way they were given the opportunity to influence the strategy that would later affect their administration and policy. A total of 10 municipalities participated. The main driver for the participating municipalities was the need to figure out how the regional strategy could be used to promote their own core values, but also to create more value for citizens across the municipalities.

The companies' main incentive to participate was their wish to work closer with public institutions (in this case the municipalities) as they contain a big market potential. However, the process of working with public institutions is often too slow and bureaucratic for this potential to be realized. Instead, companies want a more agile collaboration that is accessible and test-oriented. The hope is that Smart Greater can make this happen by using design methods, including co-creation.

Based on interviews conducted with two different citizen groups, namely seniors and commuters, the DDC concluded that the most important issue for seniors is to understand how technology can make a difference to them. For commuters, on the other hand, the most important issue is to make commuting as simple and easy as possible, enabling them to think their journey through from start to finish. Smart Greater Copenhagen should meet these needs.

Assets brought by the different actors

Depending on whether the actors work in a municipality, a company, or participate as an individual, they bring a specific professionalism and expertise into the project. The municipalities brought knowledge about policy areas into the project. Specific issues, such as the ones related to environment, welfare, transport and infrastructure and how they are tackled in an everyday context, turned out to be useful in the project. The companies, on the other hand, came with more concrete needs for how the public sector and private companies can collaborate.

Barriers in the project

One barrier was the knowledge and competence deficits experienced in the municipalities. The municipalities are used to working with political processes that run linearly and focus on a specific outcome. These political processes rely much on accountability, whereas the design process is a circular and iterative process that does not guarantee, nor is intended to guarantee, a specific outcome. This was therefore a very unfamiliar way of working for the municipalities, and it took some time to make them feel safe in the design process. They especially had problems understanding why they were not tasked to create solutions for

everyone, but instead asked to focus on a particular citizen group. However, this is exactly what the design approach does: it zooms in on a particular group in order to create solutions that match real life rather than the simplified needs of stereotyped personas.

Another barrier was diverging political interests between the municipalities. Each municipality works according to its own political agenda and therefore focuses on different issues and citizen needs. Finding a common focus, e.g. choosing two citizen groups (commuters and seniors) was therefore a bit of a challenge.

Roles, method and process

Each group had a specific role in the process. A large part of the project was about developing conceptual directions and initiatives. This part was carried out in close collaboration between the Capital Region of Denmark and the work group, with input from experts. The result was three conceptual directions: Sustainability and Growth, Health and Welfare and Mobility and Transport. These concepts built on conclusions from a qualitative analysis made by the DDC. The analysis builds on interviews with the two citizen groups (commuters and senior citizens) and selected tech-companies and SMEs. The conclusions from the analysis formed the basis for co-operative workshops where experts, students and tech-enthusiasts were involved. Next, the Capital Region of Denmark, the working group and the steering group worked in depth with delimitation, success criteria, analysis of field work and idea and concept development. Design approaches and methods were used actively throughout the entire process.

The DDC contributed to the development of the strategy in charge of the design process, including the co-creation processes. With design as the starting point, the strategy was developed in a co-creation process that took into account the needs of the companies, the citizens and the municipalities. Developing the strategy was handled as a design task and created in an interaction between micro and macro levels: from the human scale to the entire region. The goal was to create a strategy which put the individual first and translated technological possibilities into new innovative solutions. The design process was characterized by being 1) user centered, 2) explorative, 3) co-creative & 4) visual and concrete.

To lay the groundwork for the strategy, the DDC used a design game that made the actors reflect about the future. This served to establish dialogue and discussions between the different actors. In the early stage of the project, the DDC used user involvement and interviews to identify the target groups' needs. This knowledge was essential to the development of the concepts. Finally, the DDC used the How might we? Matrix, in which insights were translated into design issues and then used to generate ideas e.g. develop concepts and initiatives.

Phases of co-creation

In the specific case of Smart Greater Copenhagen, the co-creation took place in the ideation and design phases in the form of a future workshop with 130 participants. The participants were experts and companies who discussed the future scenarios for 2030 seen through the

lenses of three themes: Sustainability and Growth, Health and Welfare and Mobility and Transport. In the design phase, co-creation took place as a workshop with municipalities and selected experts. In this phase, insights about user needs found in the qualitative analysis were used to develop new solutions. These solutions were then presented to the Capital Region of Denmark who gave feedback in an iterative loop.

Short term impact

The aim of the strategy was to create value for citizens and companies through new and innovative solutions. The work that involved the DDC, took place at an early stage. The end result was a catalogue of ideas and possible solutions that would create impact and value within various business areas within the next few years. The DDC did not participate in the implementation phase. This constituted a challenge for the design phase, because DDC did not have the opportunity of ensuring the right implementation in order to meet the success criteria.

Setting an example for future solution approaches

The Smart Greater Copenhagen project serves as a great example of the possibilities of using design methods. While design methods can be adopted and used in almost all contexts, as this example shows, one must always be aware of the circumstances and needs that exist in the specific context. In other words, design methods are generic but must be specially designed for the context in order to work well. This requires initial research of user needs, as exemplified in Smart Greater Copenhagen project.

Political influence (insights)

The Smart Greater Copenhagen project was initiated as a part of a regional policy programme. From the beginning of the year 2019, however, it was decided from above (national level) to remove the region's mandate to promote business. This power shift made it difficult to maintain the strategic line that Smart Greater Copenhagen intended. Today, the task lies with the municipalities and it is uncertain to what extent they have adopted the strategy. Nevertheless, the project is a good example of how actors with different work methods and preferences can interact and share knowledge through co-creation.

Insights on the co-creation process

From the very beginning, a curiosity and an interest in doing policy making in a new way was demonstrated. The fact that DDC is partly publicly funded contributed in creating confidence for the Capital Region, who initiated the partnership. Furthermore, the DDC has a good, existing relationship and dialogue with the Capital Region of Denmark, which made the DDC an obvious partner in the project.

During the project, the DDC experienced a clash between the work culture in the public sector and private companies. The public work culture is characterized by bureaucracy and validation, whereas private companies are characterized by workflows with a focus on speed, agility and a profit-oriented approach. The first approach relies on a classical

management culture, whereas the second has more in common with the design approach. In this case, it helped to explicitly explain the different advantages and disadvantages associated with the different working methods. However, changing the work culture in a specific environment is something that takes time and requires a lot of effort.

The policy making process was influenced in the sense that it is unusual to use design methods for this type of process. Using design methods made the policy making process, which is usually a very linear process, much more exploratory. The result was a strategy that primarily focused on users, namely the actual people in municipalities and businesses. Such a focus was essential since the purpose of the project was to ensure a strategy pointing to opportunities for the future digital society, putting citizens and users at the center of digital solutions and at the same time outlining the business opportunities in the project.