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**Danish insights on how buildings contribute to
Well-being and business performance
ARCHITECTURE CREATES VALUE**

**DANISH
ASSOCIATION OF
ARCHITECTURAL FIRMS**

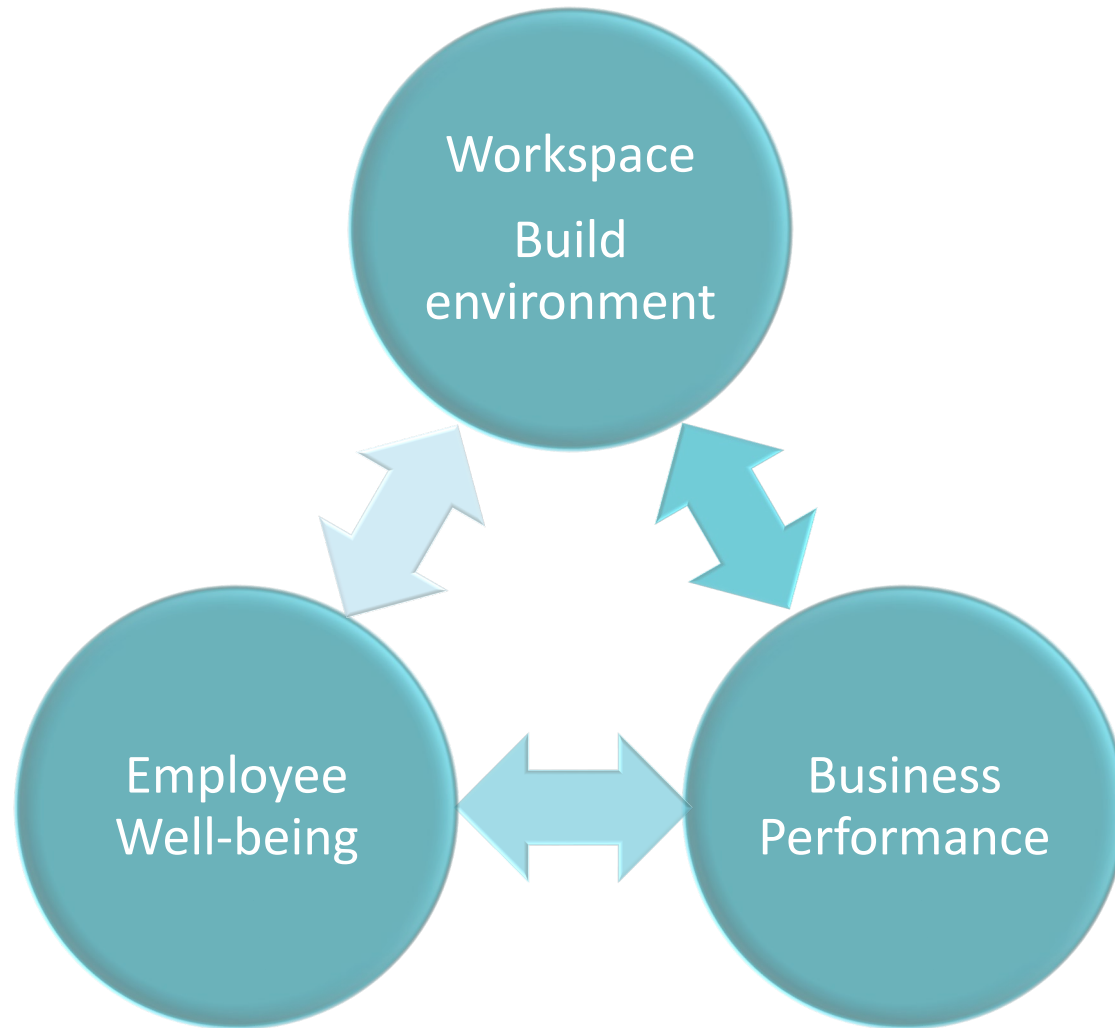
CASE: Rambøll Hq – Mikkelsen arkitekter



“There’s focus on sustainability and reduced energy use – but also on the daily operation and how the building stimulates collaboration across departments and disciplines”

– Lars Ostenfeld Riemann, Client

FRAMEWORK



**Architecture -
How does it
affect people?**

Architectural design

” When the architect wants grass on the roof...

...who has the ‘can-it-be-sold-hat’ on?”

EDC Real estate 2015

What is it worth?



Architecture creates value: 75+ Danish cases



25.10.16 #CASE
DANMARKSHUSENE

Danmarkshusene i Rødovre er en ny generation almene boliger, der er billige, bæredygtige og attraktive.



17.09.16 #CASE
FØDEVAREBYGNINGEN KU SCIENCE

I den CO2-neutrale Fødevarerbygning på KU Science opleves styrket kommunikation og arbejdsglæde.



21.09.16 #CASE
WALK & TALK CIRCLES

Danmarks første "Walk & Talk"-landskab styrker møde- og læringsaktiviteter ud i naturen.



21.09.16 #CASE
GREEN LIGHTHOUSE

Green Lighthouse er blevet et udstillingsvindue for fremtidens bæredygtige offentlige byggeri.



16.06.17 #CASE
GYLDENPARKEN

Helhedsrenovering øger trygheden, mindsker kriminaliteten og styrker beboerfællesskabet i Gyldenparken.



23.03.17 #CASE
RØSNÆS RUNDT

Røsnæs' natur er blevet tilgængelig med nye muligheder for aktiviteter og oplevelser til vands og til lands.



22.02.17 #CASE
SEB DOMICILET

SEB domicilet's placering og markante arkitektur styrker SEB Bank's brand, forretning og interne processer.



06.02.17 #CASE
FREM TIDENS BØRNEHJEM

På børnehjemmet Villæn er arkitekturen med til at mindske konflikter og skabe større tryghed.



21.09.16 #CASE
SOLHUSET

Solhuset i Hørsholm er en børnehavainstitution, som sætter fokus på lys, klima og trivsel.



21.09.16 #CASE
KMC NORDHAVN

KMC Nordhavn er det første DGNB-certificerede kontor- og erhvervsbyggeri i Danmark.



21.09.16 #CASE
HASLE HAVNEBAD

I Hasle oplever borgerne, at deres nye havnebad har givet byen en ny attraktion og identitet.



21.09.16 #CASE
MOLTWALLEN I SDR. NISUM

Ombygning styrker lokalt sammenhold, borgernes stolthed og integrationen af turismen i lokalafmødet.



30.01.17 #CASE
VANDHALLA EGNET HØJSKOLEN

Inkluderende avsmøntal skaber lokal stolthed, forbedrer sundheden og øger glæden ved bevægelse.



24.01.17 #CASE
MUSHOLM FERIECENTER

Sports- og feriecenteret Musholm viser vejen frem for tilgængelig arkitektur.



18.01.17 #CASE
GREEN SOL I UD I UD USE

Ekspérimentarium for grønne ideer bygger bro mellem dansk turisme og industri.



30.11.16 #CASE
DANSKE HANDICAP OG ANSÆTTELSESHUS

Øget arbejdsglæde, engagement og stolthed. Styrket vidensdeling, samarbejde og konflikthåndtering.



18.09.16 #CASE
DTU SKYLAB

Populært mødested giver mere innovation og entreprenørskab med 6000 besøgende om måneden.



18.09.16 #CASE
AALBORG HAVNEBAD

Samlingssted for badning, afslapning og socialt samvær skaber og får ved havnefronten i Aalborg.



18.09.16 #CASE
PLUG IN PLAY

PLUG IN PLAY skaber mere byliv i Drestad Syd.



18.09.16 #CASE
RYSGADE 30A-G

Bæredygtig byforståelse og energieffektivisering af ejendom på Rysgade 30 i København.



18.09.16 #CASE
LINDEVANGSPARKEN OG SLD JFEN

Rekreativ område anvendt til afvikling af kraftige ragnhandelser, rekreative formål, undervisning og optræden.



18.09.16 #CASE
SDVÆS

Rekreativ byrum skaber øget markedføringsevne, mindskede oversvømmelsekomplikationer og øget boliginteresse.



17.09.16 #CASE
ALLERHUSET

Nye rammer inspirerer til udadvendte events, styrker virksomhedens image og kommunikation med omverdenen.



17.09.16 #CASE
FREDENSBORG SKOLE VILHELMSRO

Fredensborg Skole Vilhelmsro er et stærkt forberedt for fremtidens klimatilpassede skolebygninger.



18.09.16 #CASE
UPCYCLE HOUSE

Nyt enfamiliehus reducerer klimabelastning med 86%. Kodeordet er IBOVOLLING.



18.09.16 #CASE
BRICK HOUSE

MiniCO2-huset "Brick House" har en levetid på minimum 150 år og en



17.09.16 #CASE
SØNDER BOULEVARD



17.09.16 #CASE
ENGAVE I NI PARK

Inklusion af udsatte grupper skaber

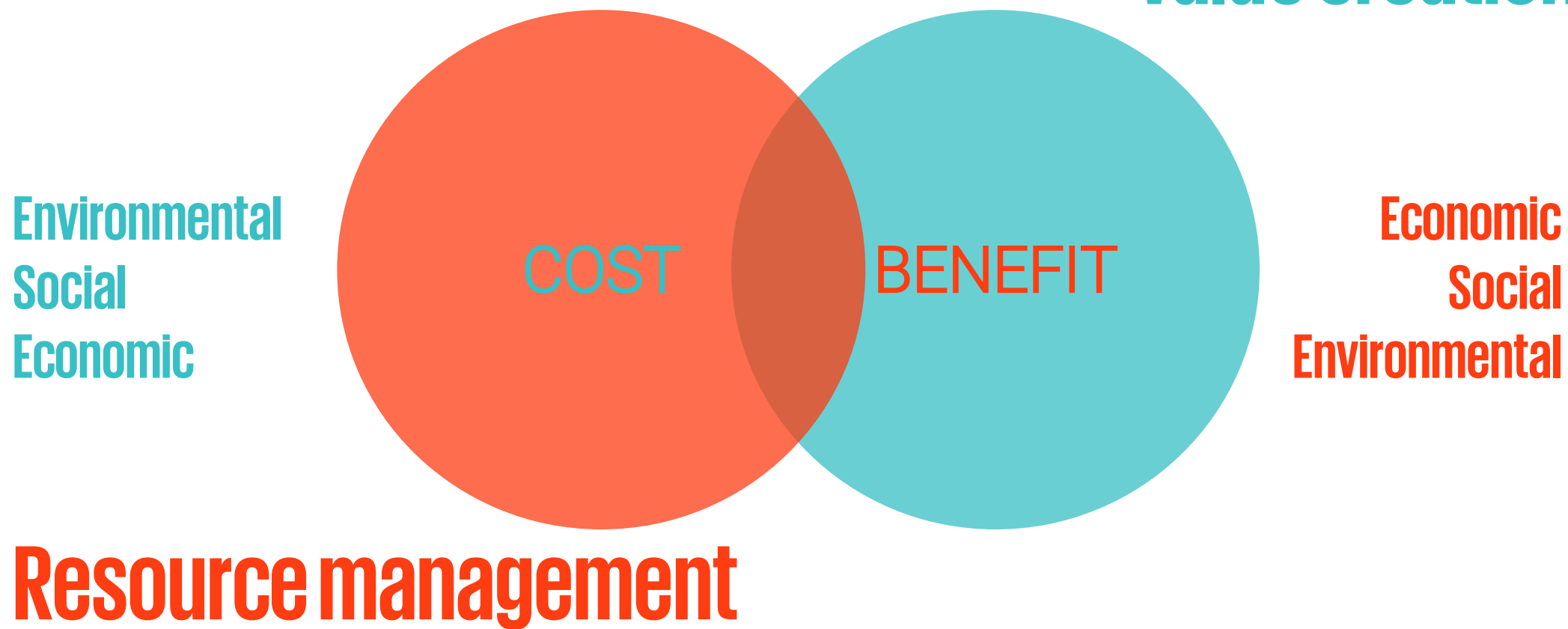


17.09.16 #CASE
AKTIVITETSGARAGER VED ÅNGØ RAVN

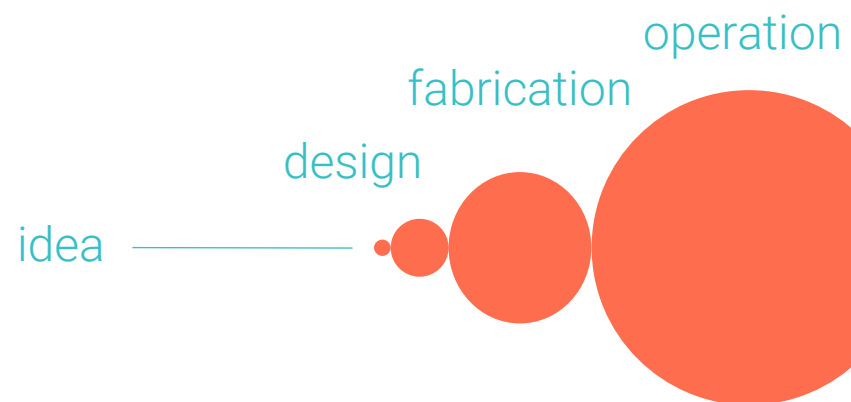
Nye bykvaliteter er med til at styrke Høje Tåstrup lokale fællesskab og byens tryk i Åbenrås Kommune.

Productivity and learning
Urban Life
Health
Resources
Social Cohesion
Climate
Constructability
Economy

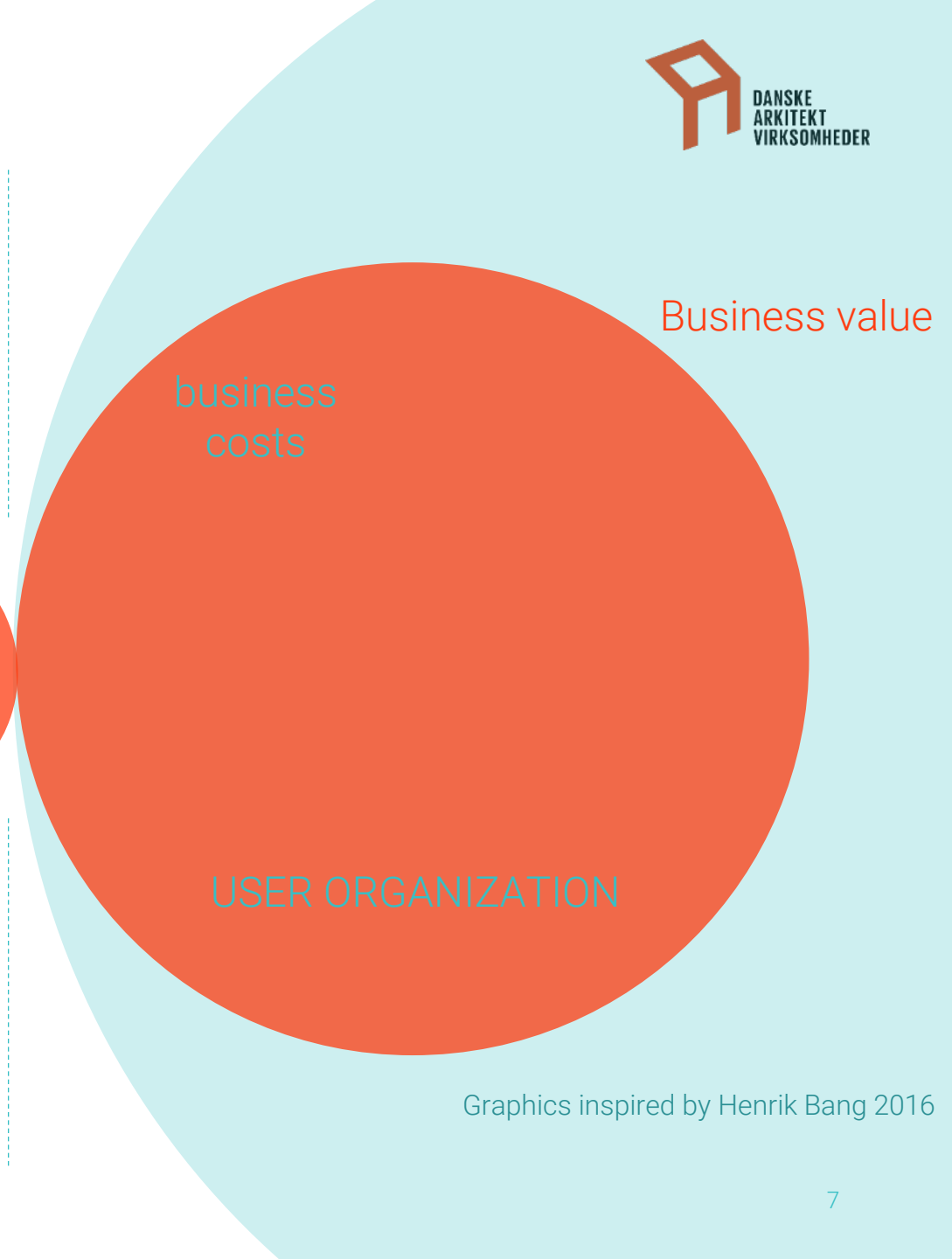
Value creation



Value



BUILT ENVIRONMENT



Cost

Graphics inspired by Henrik Bang 2016

ARCHITECT

DOCUMENT YOUR VALUE CREATION

How to get started!



Social data at the heart of the business

PRACTICAL EXAMPLE: SIGNAL ARKITEKTER

SIGNAL Arkitekter work with user data as a basis for their business model, optimising the use of rooms and buildings in ways that benefit users and clients' activities.

Internal value

Since the company opened in 2000, SIGNAL Arkitekter has been using observation studies, interviews and questionnaires to analyse the needs of their clients. SIGNAL Arkitekter's analyses of rooms and behaviour from several hundred projects have been compiled into a database that SIGNAL Arkitekter draws on for use in all its assignments. By obtaining new information regularly and comparing it with existing data, SIGNAL Arkitekter is creating an evidence-based foundation for its design principles and solutions.

Not only is SIGNAL Arkitekter able to draw on its knowledge of clients' specific challenges, it can also relate to implemented solutions from similar project types with well-documented social and financial effects – schools, health buildings or commercial buildings.

External value

Using user involvement throughout the entire advisory process gives users, clients and advisors insight into the specific needs that are to be met by the project. Formulating values and objectives together creates a collective foundation for and understanding of the assignment. Testing design proposals and prototypes through play and practical application, users have the opportunity to make their own mark on the solutions so that they meet their needs as widely as possible. The discussion involved creates a sense of co-ownership in the project and a better understanding of the potential for use when the project is put into use.

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Why is it important to document value?

"At SIGNAL, we work with concepts so that we can always explain what we're doing, why we're doing it, who we're doing it with and what the outcome will be. We always describe what the objective is and how we create value in all our processes and interim steps. After all, if we can't explain what we're doing and why, why should our clients buy advice from us?"

What external value is added in the relationship with your developers and partners?

"As far as we're concerned, everything hinges on our clients and users. This is definitely a different way for architects to think. As architects, we've found ourselves in a difficult place because we stood on the moon and spoke a language without communicating with the people who'll be using the rooms. What we're always linking in the SIGNAL model is the fact that users come first, and rooms are in second place."

What internal value does this add to the practice?

"When we turn up at sales meetings, we know our clients before they walk in the door because we have a vast knowledge of various industries thanks to our data. That knowledge gives us solid credibility at sales meetings. Clients can see that they've come to the right place at their very first meeting with us."

Has it strengthened your business?

"If you want to enter the construction food chain, you have to be able to process data. This means you need to introduce a systematic approach to the way in which you enquire about the client, and to your processes at the practice. You have to be clear on how to analyse your data and understand users. It's all about being extremely analytical. User data and user relations are clearly an unused force in our industry."



Gitte Andersen
SIGNAL Group
Head of SIGNAL UK
Global Head of Workplace Management & Design
Architect MAA, Construction Economist MDB

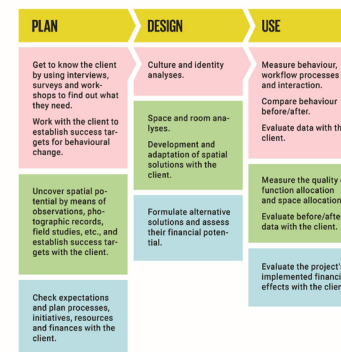
PRACTICAL EXAMPLE: SIGNAL ARKITEKTER SOCIAL DATA AT THE HEART OF THE BUSINESS

SIGNAL Arkitekter uses data strategic tool. Understanding needs and preferences, defining the assignment to be implemented and specifying the values that you want to create are key.

Value creation based on data

SIGNAL Arkitekter focuses on creating value by means of planning and programming, and uses rooms as tools to improve the performance of companies and organisations. SIGNAL Arkitekter maps how rooms are used, when and by whom so that they can point out untapped potential, create new links and partnerships between users or come up with suggestions for new facilities, with better internal links and optimised use of space.

When the company has worked together with the client to describe the starting point for the assignment – a baseline – and defined its success criteria, it is possible to assess and compare how well the solutions are working throughout the entire process in respect of the social and business-related parameters.



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What are the secrets to great performance by design?

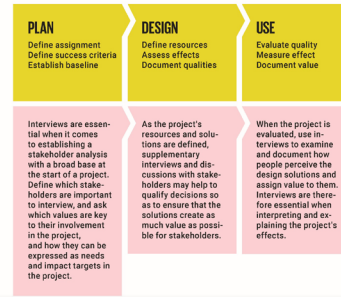


METHOD: INTERVIEWS

Who perceives what and why?

Use interviews to define value concepts for your project's stakeholders. Interviews provide an insight into social and cultural phenomena by asking what interviewees think of the world and finding out what they think, feel and do in various contexts. Interviews provide an opportunity to uncover tacit intelligence, obtain expert knowledge and qualify the interpretation of the spatial and social patterns that are discussed or observed.

Combine interviews with observations, questionnaires and discussions in workshops or focus groups in order to harvest insight into stakeholders' values and the influence of the design solutions on their behaviour. Plan your interviews so that your interviewees are representative of the issues and interests to be addressed by your project, and justify any omissions. Create a question framework. Define a series of questions that are the same for the stakeholders, and supplement these with questions that address the issues facing individual stakeholders, or their interests. Give stakeholders themselves the opportunity to define questions or issues that you have not foreseen. Gather together your interviews in a collective interpretation framework. Why various interviews? Can they be synthesised to form mo




CASE: AART ARCHITECTS, KULTURVÆRFET

PLAN	DESIGN	USE
Define assignment Define success criteria Establish baseline	Define resources Assess effects Document qualities	Evaluate quality Measure effect Document value
The planning of Kulturværftet was developed by the municipality of Helsingør in discussion with citizens. The aim of Kulturværftet was to reinforce the transformation of Helsingør from an industrial town into a knowledge society and culture destination.	AART architects presented the winning design in an architectural design competition. The design principles from the competition proposal were qualified further in discussion.	An interview-based survey carried out by the Alexandra Institute documented value from a user perspective and gave both developers and AART architects important data on how the building was an asset for its users. Visitors were generally very pleased and felt that the place provided an inspiring framework for cooperation knowledge.



METHOD: WELL-BEING AND HEALTH

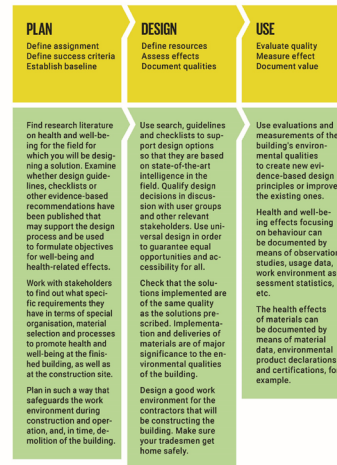
Use evidence-based design principles to design buildings that support social behaviour, well-being and health for all.

Increasing amounts of research are being carried out into how design can underpin well-being and health, and literature, guidelines and instructions are available that can be used to qualify design and process solutions. Staying abreast of the latest information in the field provides the best possible starting point for ensuring that the solutions have the intended effect.

Well-being and health are largely related to how spatial conditions facilitate behaviour and activities and offer users opportunities. Make sure that these opportunities are available to all by using universal design. Arrangements that promote health and well-being are frequently very much dependent on behaviour, and solutions have to be formulated so that they fit in with the social and cultural context in order to have the best possible effect. Therefore, use discussions with stakeholders in your efforts to adapt evidence-based design principles to the specific challenges of the assignment.

Also be aware that material attributes and production processes may be linked with effects on health and well-being. Use instructions, certifications, checklists and environmental product declarations to avoid unwanted chemicals and production processes that may subject tradesmen working on the job to a poor work environment and may pose a risk to users.

Evaluate and measure the environmental qualities of the building and its effects on well-being and health when it is put into use. Use the results to improve design principles and solutions for future projects.




CASE: 3XN ARCHITECTS, MIDDELFART SPAREKASSE

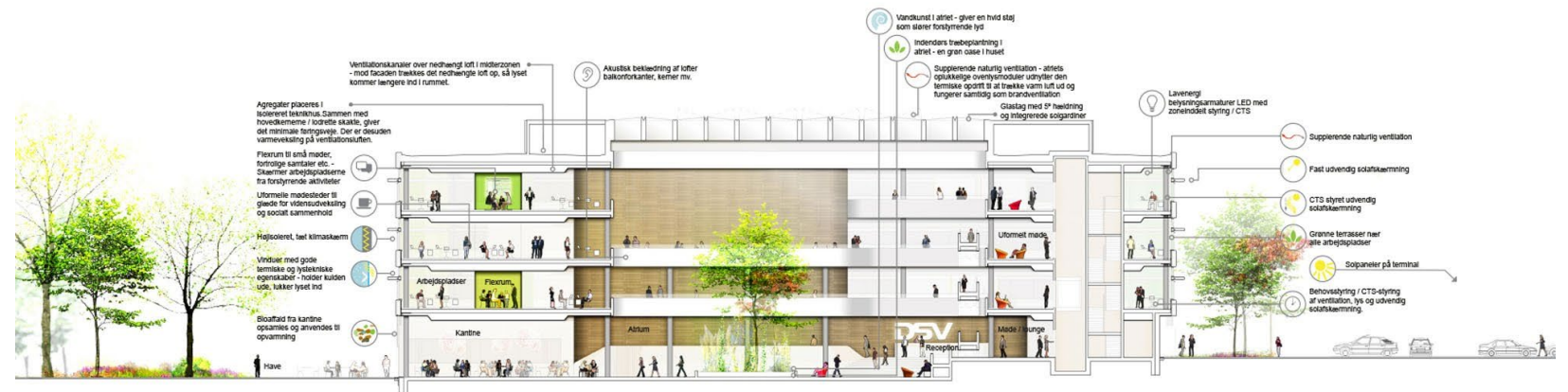
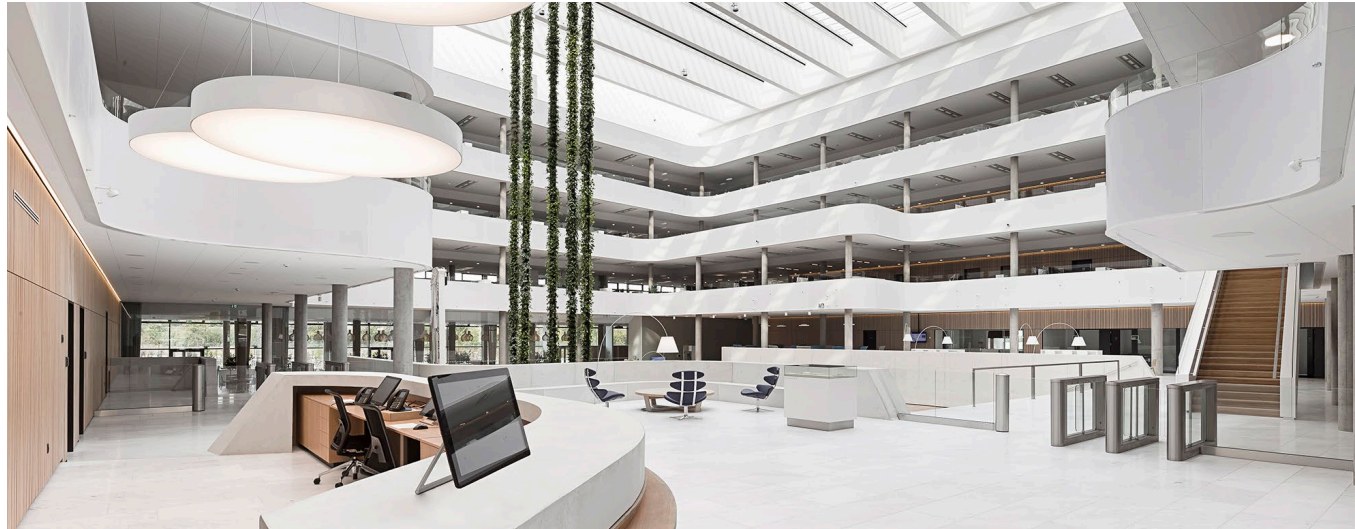
PLAN	DESIGN	USE
Define assignment Define success criteria Establish baseline	Define resources Assess effects Document qualities	Evaluate quality Measure effect Document value
<p>Location MIDDELFART OFFICES AND PUBLIC AREA</p> <p>Type 2010</p> <p>Completed in 2010</p> <p>Site 5000M2</p> <p>Budget DKK 60 MILLION</p> <p>Architects 3XN</p> <p>Landscape SCHJØNHERR</p> <p>Developer TREKANTENS EJENDOMSSELSKAB A/S</p> <p>Contractors KINGO KARLSØN A/S, JØRTON A/S, GULDFELDT A/S</p> <p>Engineers RDWI</p> <p>Artistic decoration OLAVURELIASSON</p>	<p>The purpose of this project was to enhance employee motivation, job satisfaction and well-being by creating an adventurous work environment that supported cooperation and informal knowledge sharing. It was important for the building to become an integral part of urban life as the local community was made up of customers of the bank.</p> <p>3XN worked with evidence-based principles for the work environment and good indoor climate: views and access to nature, varying light conditions with lots of daylight and minimal dazzle, a building design that encouraged movement and informal meetings, clear orientation around the building and zoning that permitted both concentrated working and social interaction.</p> <p>The building's transparent roof structure links the centre of the town with Lillebælt and is a public space during daytime hours.</p>	<p>3XN carried out an evaluation of the building in partnership with RUC, which showed that 80% of staff were happier with the new building than with the previous premises, and 93% felt that they worked efficiently in the building.</p> <p>Middelfart Sparekasse has been named the Best Workplace in Denmark on a number of occasions, most recently in 2016. The company is also on the list of the best places to work in Europe.</p>

CASE DSV Hq by PLH Architects

Architecture - How does it affect people?

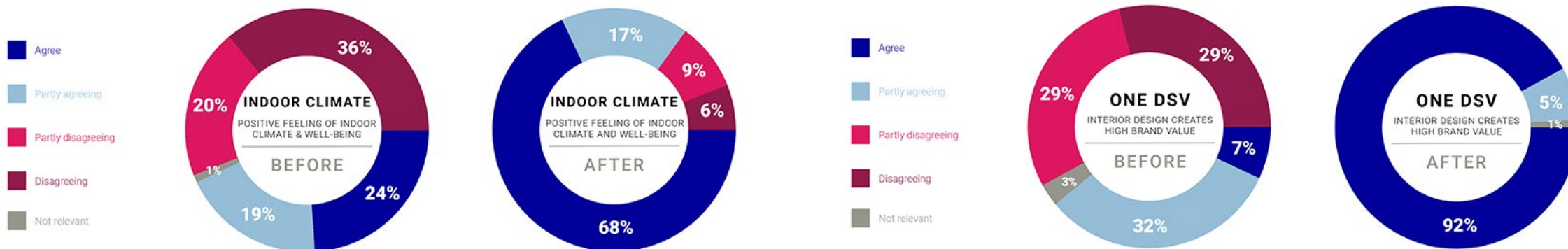


CASE DSV Hq by PLH Architects



CASE DSV Hq by PLH Architects

Architecture - How does it affect people?



En brugerundersøgelse viser at den nye arbejdsplads skaber høj branding værdi - følelsen af "One company - one DSV" er steget til 92% (fra 7% før flytningen).

En brugerundersøgelse viser at medarbejdertilfredsheden med workplace design, arbejdsmiljø og motivationen er steget til 85% (fra 43% før flytningen).

Quotes from DSV employees after moving in to the new office

"The atmosphere is less stressful – it's hard not to smile which is kind of cool!"

"The tone between us has become much nicer"

"Now, we even dress better"

"It's very motivating to be working in such a light and airy office building"

"We work together in a better way"

CASE: Danmarkshusene – Vandkunsten, social housing



Photos by Vandkunsten

CASE: Moesgaard – Henning Larsen Architects



Photo by Jens Markus Lindhe

CASE: Moesgaard – Henning Larsen Architects



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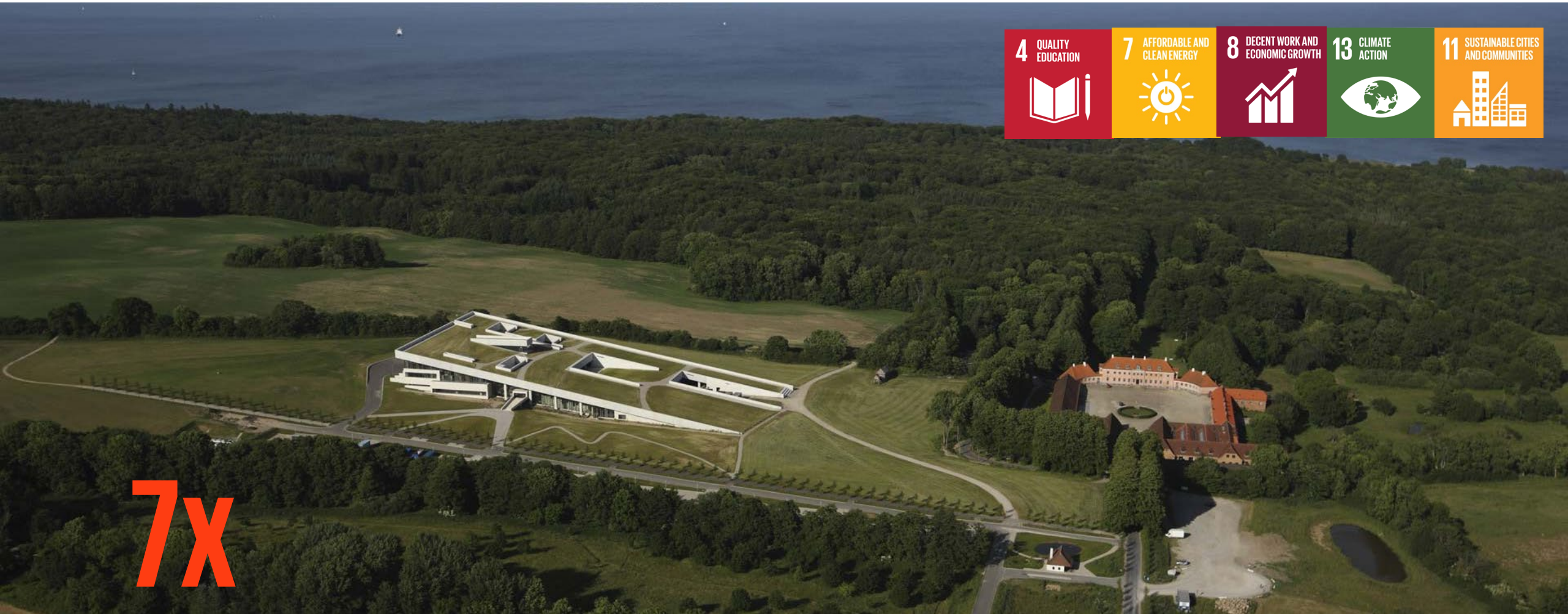


Photo by Jens Markus Lindhe

Architecture World Congress - UIA 2023 Copenhagen

