

INTELLIGENT M² – LOTS OF RESSOURCES TO BETTER LEARNING ENVIRONMENTS

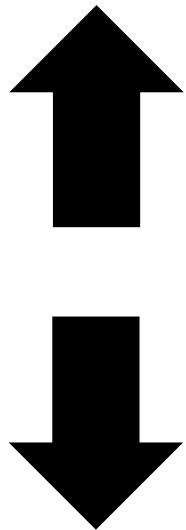
GITTE ANDERSEN, SIGNAL

CEO, GLOBAL HEAD OF WORKSPACE MANAGEMENT & DESIGN

SPACE – A TOOL TO BETTER PERFORMANCE

SIGNAL

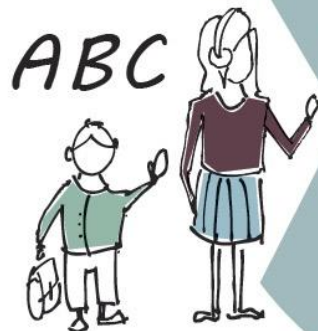
DESIGN OF LEARNING ENVIRONMENTS THAT ENCOURAGE WORKING- AND LEARNING PROCESSES



INTELLIGENT M²
Co-thinking of
Visions & Strategy
People and learning
Architecture &
Space design

OPTIMIZED LAY OUT OF M²
CORRESPONDING TO ACTUAL
USE DURING THE DAY

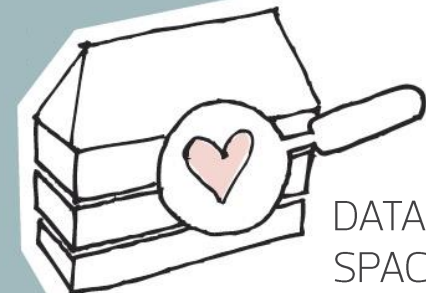
LEARNING
RELATIONS
WELL-BEING
BEHAVIOUR



MORE AND
BETTER
FOR LESS



VISION
STRATEGY
MANAGEMENT



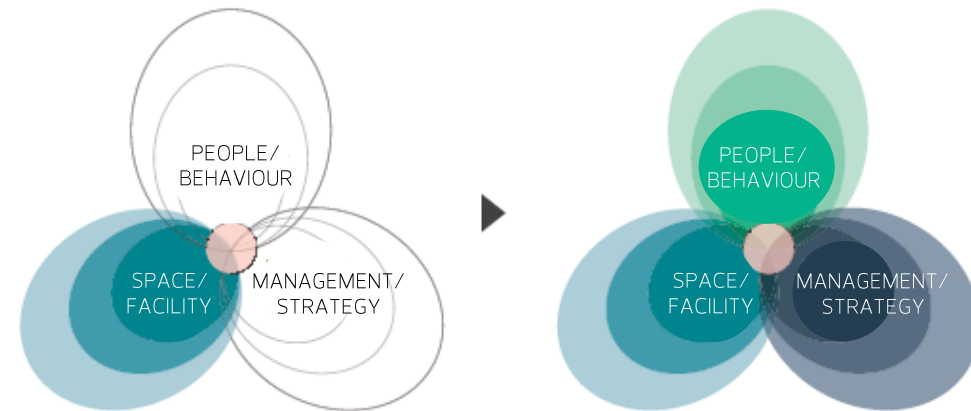
DATA
SPACE DESIGN

INTELLIGENT M² & DEMOCRATIC ARCHITECTURE

S:GNAL

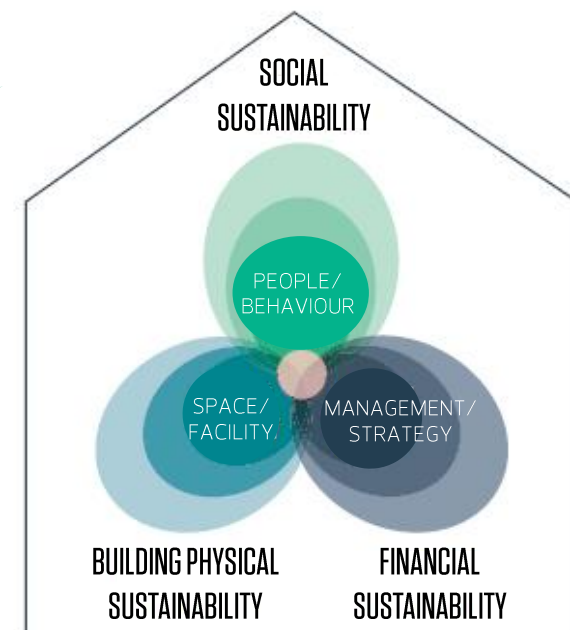
"THE ARCHITECTURE CAN – WHEN IT'S BEST – SUPPORT THE LINK BETWEEN SPACE AND LEARNING BY BEING **INVITING, DEMOCRATIC AND ORGANIZING AROUND COMMUNITIES**"

- Nordic learning environments are some of the strongest community leading buildings and spaces
- Everybody play and learn in the spaces of the public sector from early childhood till graduation
- Using space as 'the third teacher' or pedagogue



"DEMOCRATIC ARCHITECTURE"

- From mono functionality to poly functionality & 'do-it-together'
- From private owned spaces & m² to communal and collaboration



SIGNAL BENCHMARK – EVIDENCE & DATA THROUGH 17 YEARS

SIGNAL

Online Survey



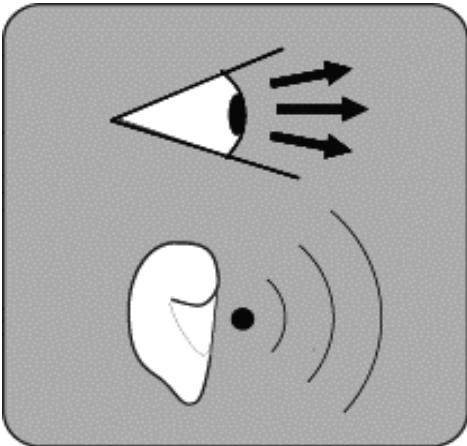
Interviews



Desk Research



On site observations /
censors



Workshops



Network Analysis



SIGNAL

DATA DATA DATA



LOTS OF HIDDEN RESSOURCES JUST WAITING TO BE ACTIVATED SIGNAL



- On average, workstations are used **32 %** of the time / maximum **40 %**



- Available group- and meeting rooms are used between **26 %** and **67 %** of the time
- When group- and meeting rooms are used, the utilisation of capacity is between **18 %** and **51 %**



- On average, the auditoriums are used **76 %** of the time
- When the auditoriums are used, the utilisation of capacity is **30 %**



- The student's preparation rooms are used **56 %** of the time
- When the preparation facilities are used, the utilisation of capacity is **31 %**



- On average, the common areas are used between **50 %** of the time

TOTAL USE OF CLASSROOMS IS 54 %
(AUDITORIUMS / LABORATORIES / DATA HALLS)

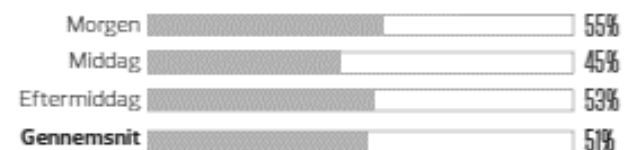


OBSERVED USE OF M² DURING THE DAY

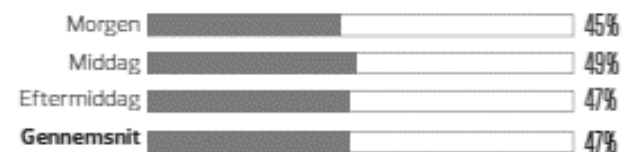
SIGNAL

RUMOBSERVATIONER 1. ETAGE

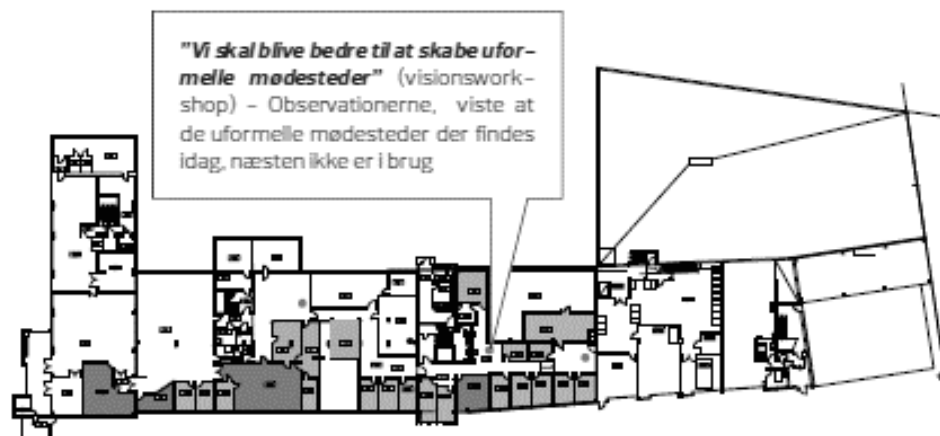
KONTORER 1-2 PERSONER (BRUG AF ARBEJDSSTATIONER)



ÅBNE KONTORER OVER 2 PERSONER (BRUG AF ARBEJDSSTATIONER)



MØDE/VIDEOKONFERENCERUM (BRUG AF RUM)

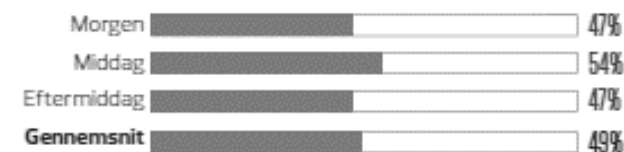


RUMOBSERVATIONER 2. ETAGE

KONTORER 1-2 PERSONER (BRUG AF ARBEJDSSTATIONER)



ÅBNE KONTORER OVER 2 PERSONER (BRUG AF ARBEJDSSTATIONER)



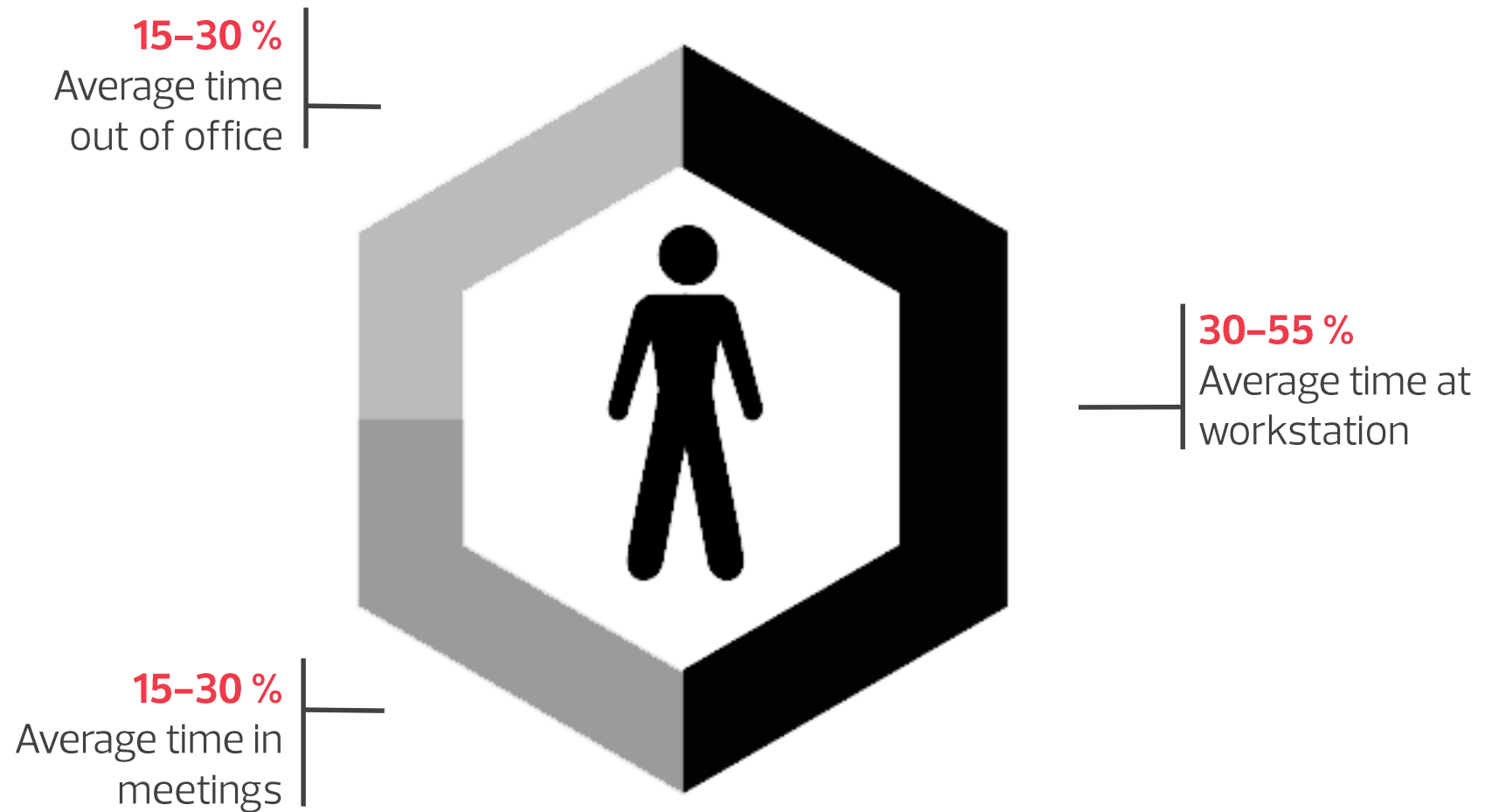
MØDE/VIDEOKONFERENCERUM (BRUG AF RUM)



50 %
of the
M² are
empty

HOW DO THE ADMINISTRATION ON CAMPUS WORK – ALONE OR TOGETHER?

SIGNAL



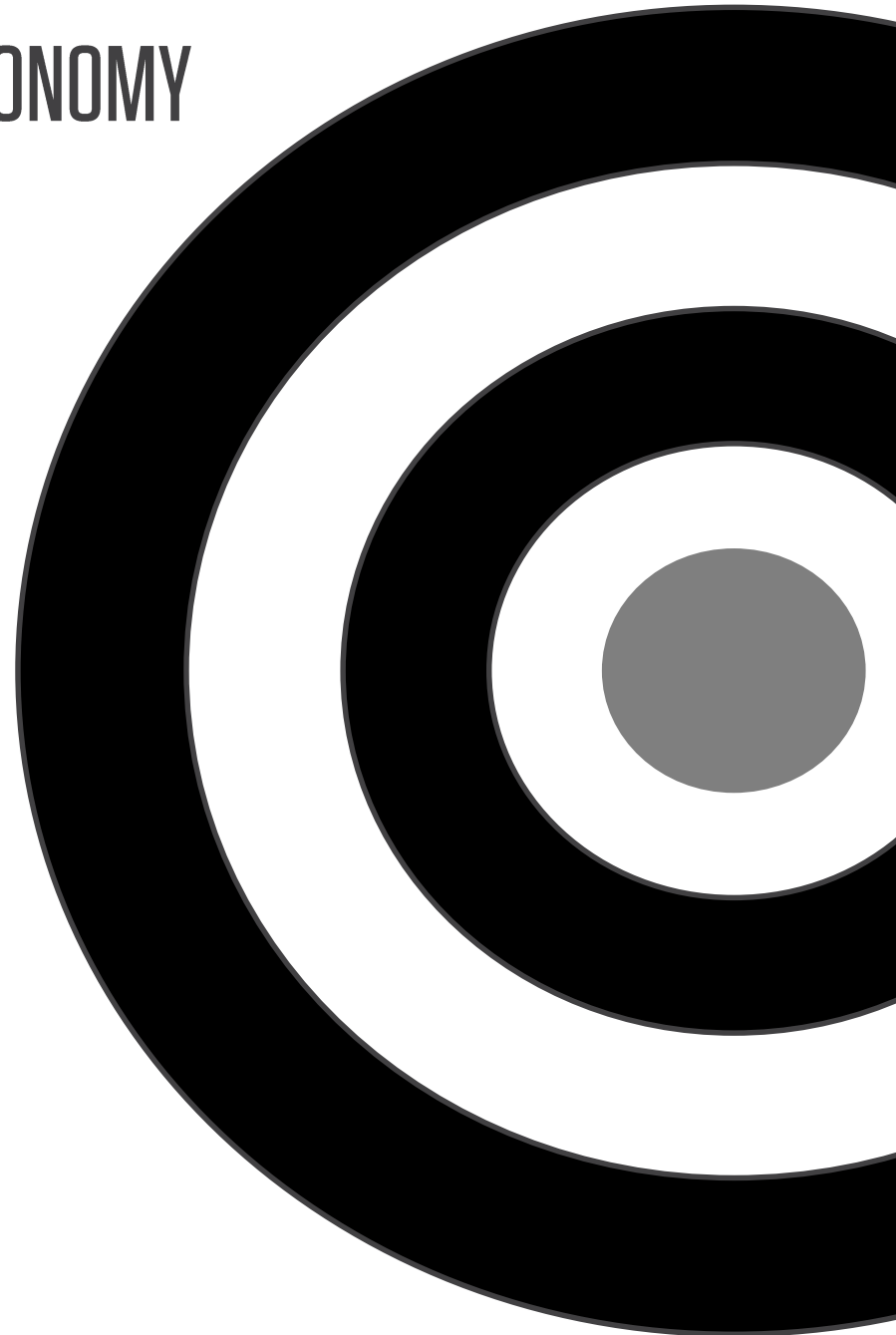
MENTAL REBUILD®

SIGNAL

BEHAVIOR & WORKSPACE IN A SHARED ECONOMY

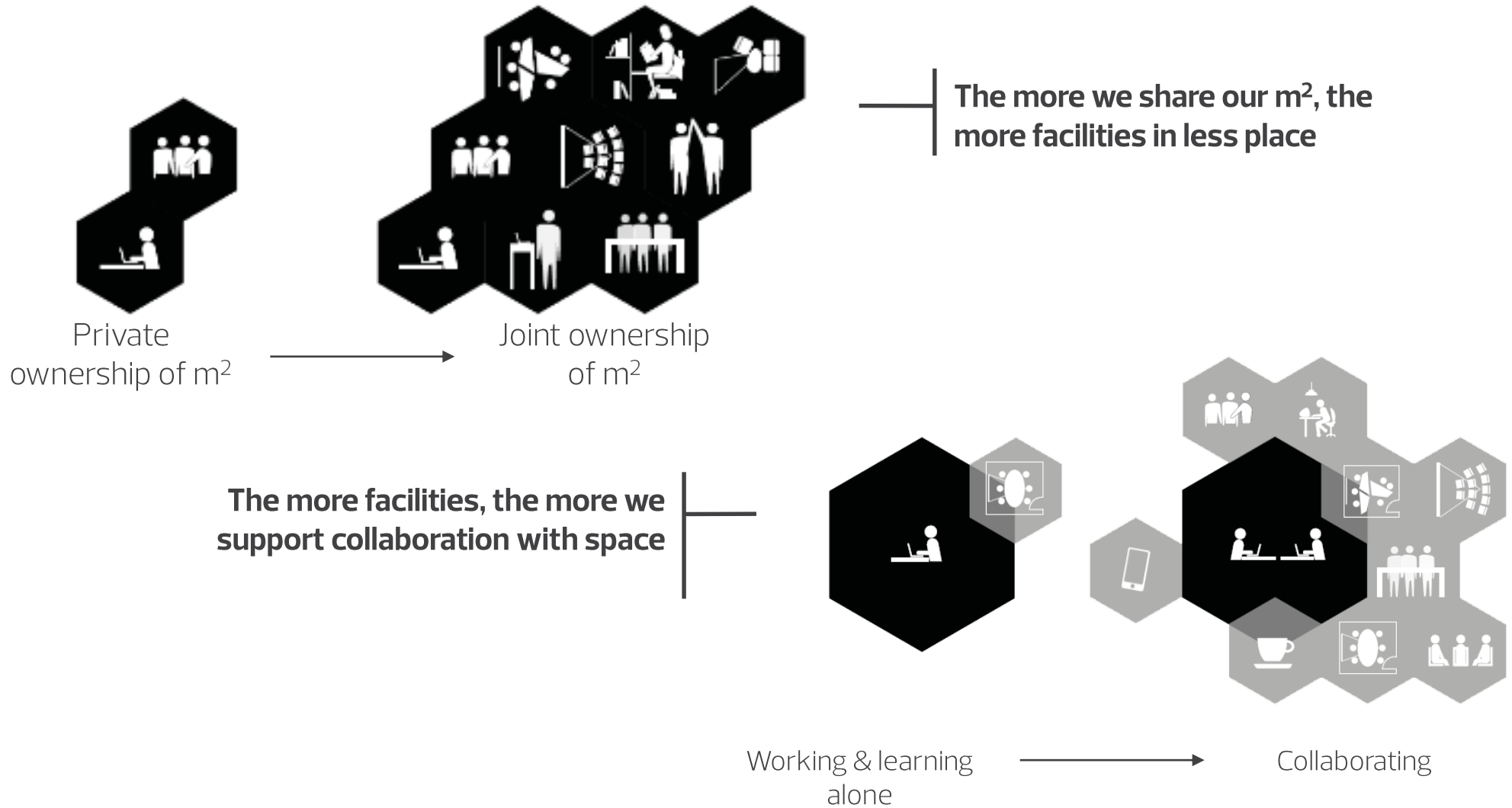
**Up to 35 % better
performance in the
same m2 only by
challenging behavior** –
WITHOUT rebuilding or moving
walls

More is not always better!
It is more important to have access
to facilities when we have the need,
than owning them 24 hours a day.



M² & PERCEPTION OF LEARNING AND WORKING

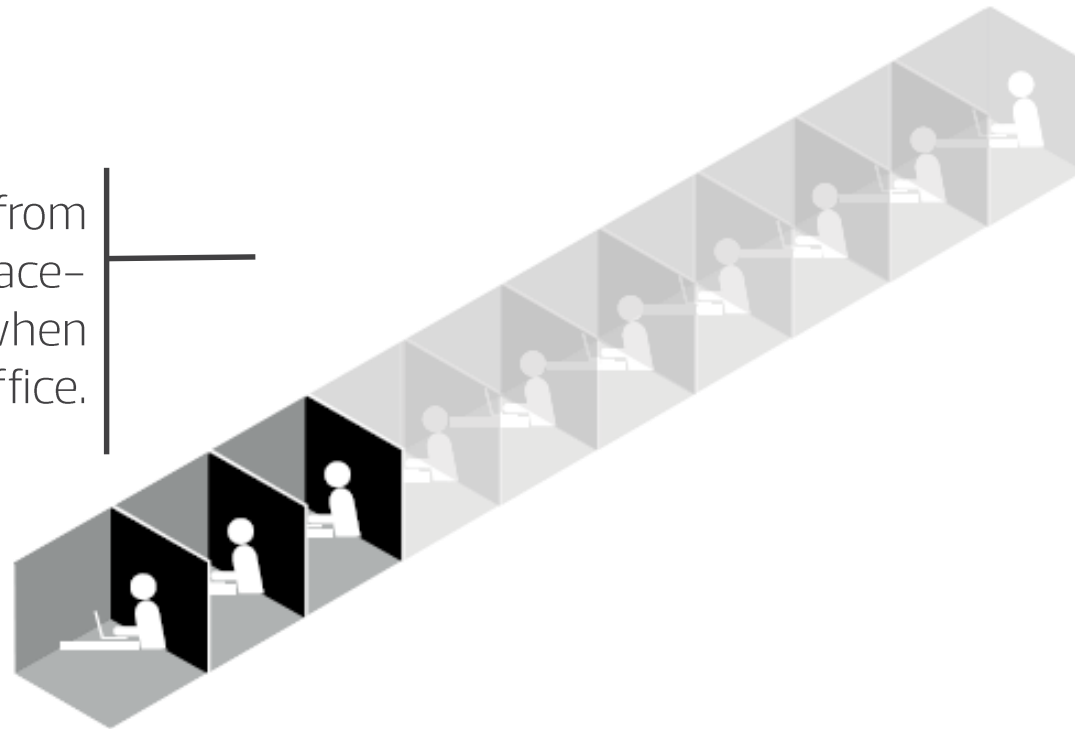
SIGNAL



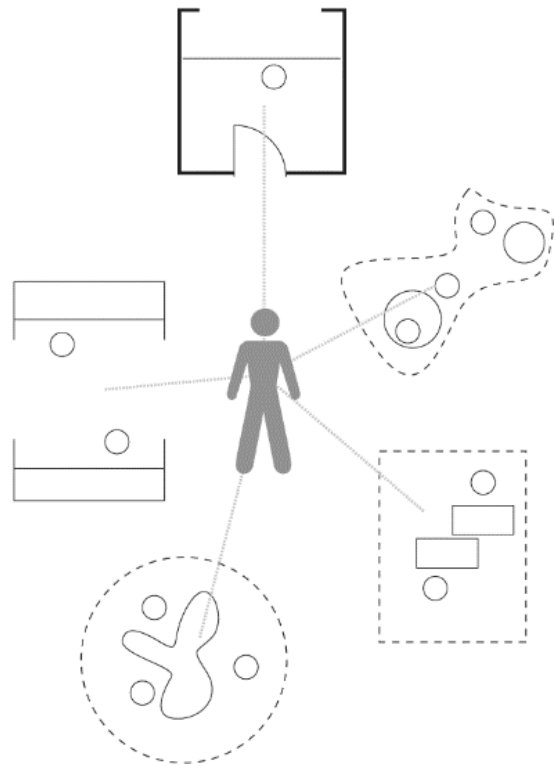
SPACEDESIGN & FACE TO FACE DIALOG WITH COLLEAGUES

SIGNAL

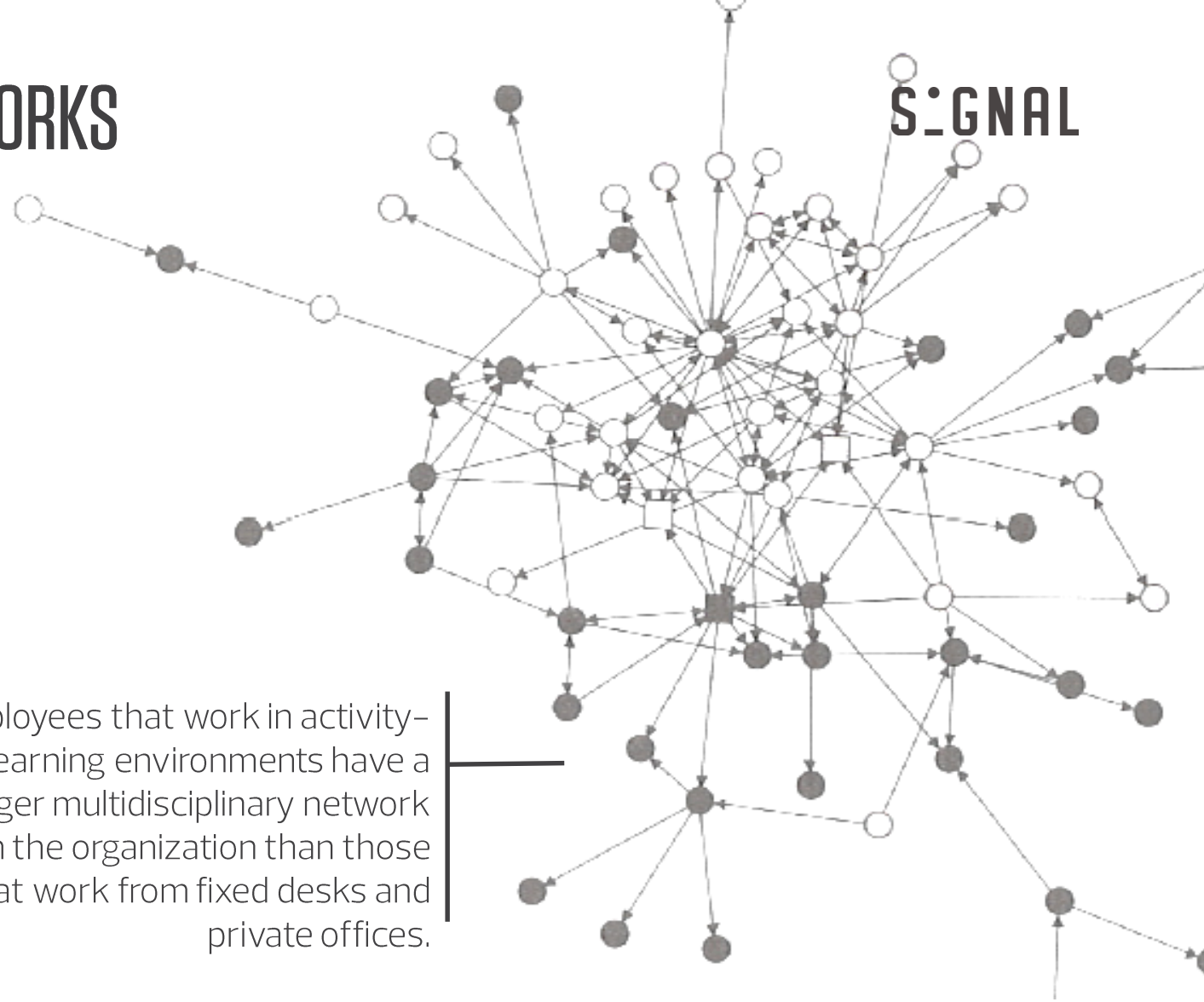
26 % of the people who work from a private office, has no face to face-dialog with other colleagues when being in the office.



SPACE DESIGN & NETWORKS



Employees that work in activity-based learning environments have a larger multidisciplinary network within the organization than those that work from fixed desks and private offices.

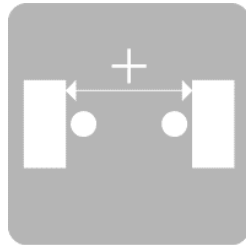


KNOWLEDGE SHARING & SOCIAL RELATIONS

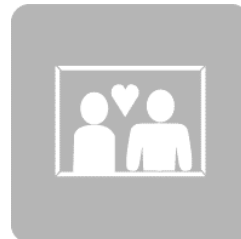
SIGNAL



We mainly share knowledge with those who we have the best social relationship.



With distances over 50 meters the knowledge sharing falls dramatically.



The more time we spend together, the more sympathy we have for each other.

SIGNAL

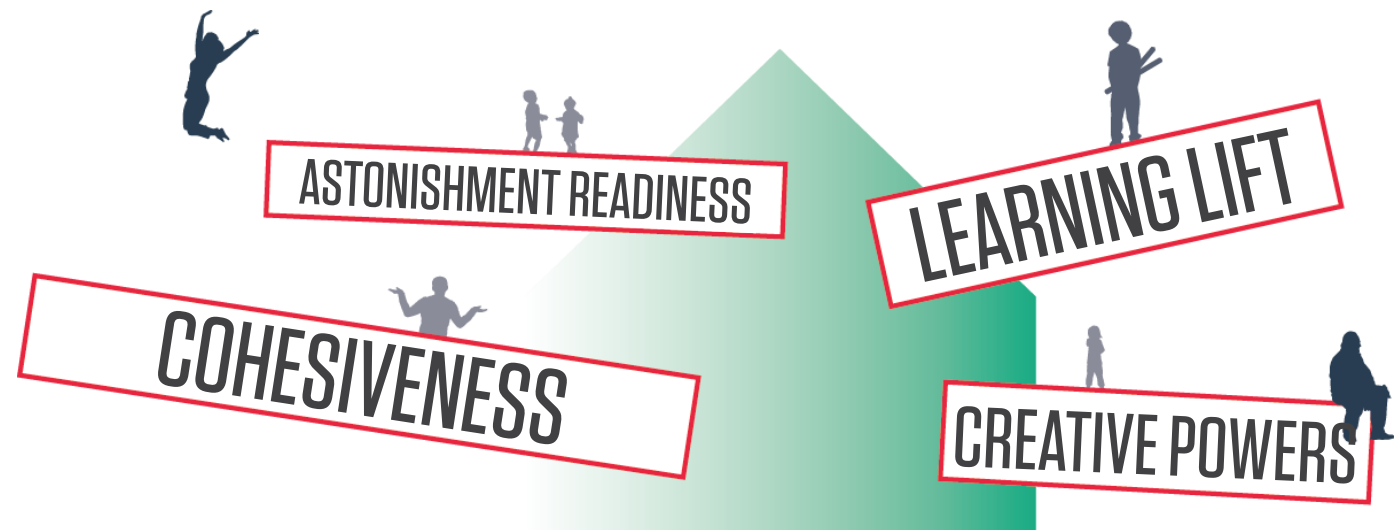
FUTURE POTENTIAL



CAMPUS IN SOCIETY – DEALING WITH THE MAIN CHALLENGES SIGNAL

Increased **digitisation and individualisation**

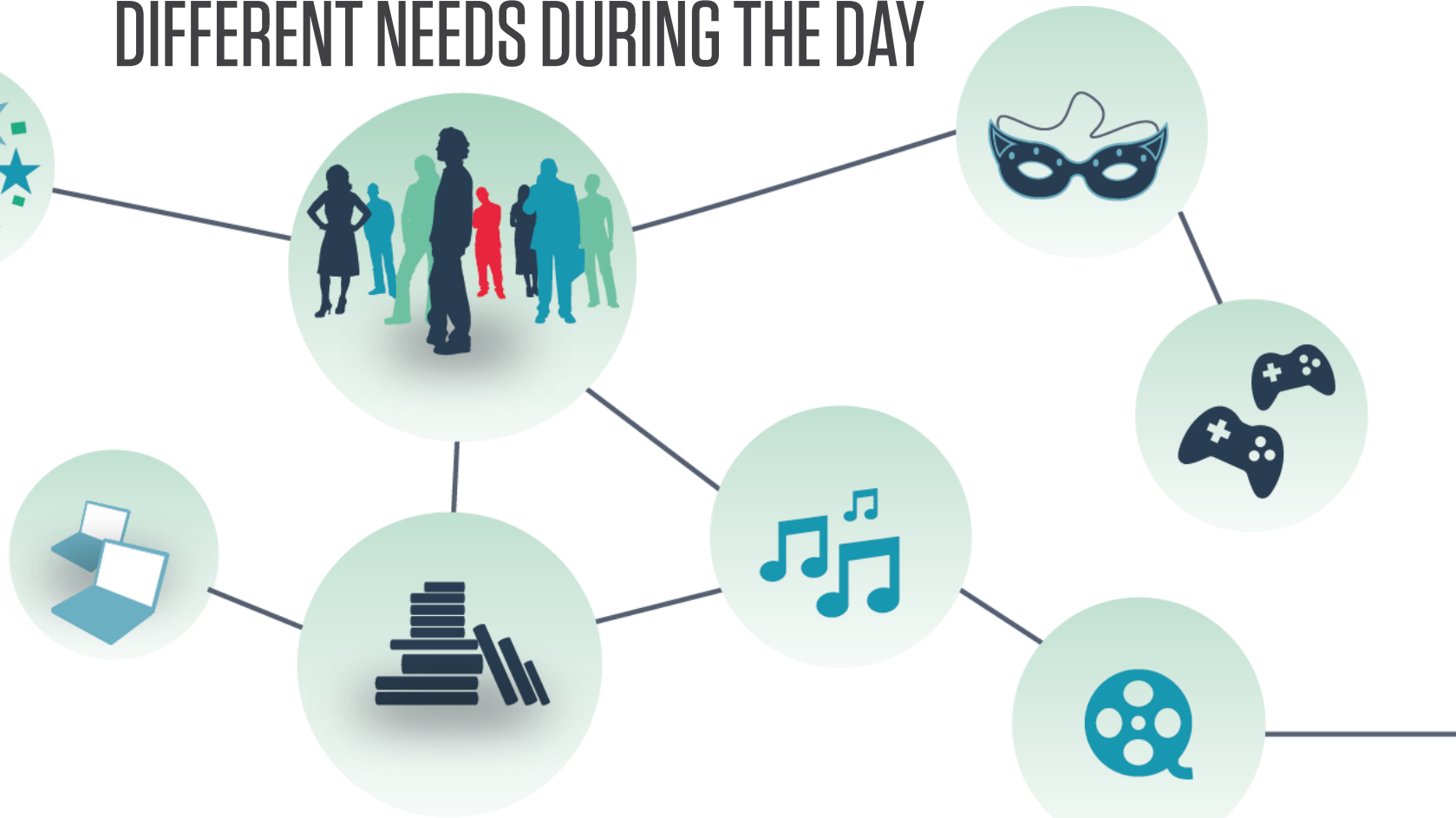
Increased **social differences** and increased **cultural fragmentation**



The potential

In a welfare economy on a diet with new requirements for the future learning environments, there is a need for increased focus on existing **resource fullness.....**

MORE USERS within the same space....
DIFFERENT NEEDS DURING THE DAY



But in space that can be shared

FLEXIBILITY, ADAPTABILITY & MULTI-FUNCTION

APPLICABILITY in time and space is needed.....

'GOLD IN THE NEIGHBORHOOD' – ACTIVATING FREE RESSOURCES SIGNAL

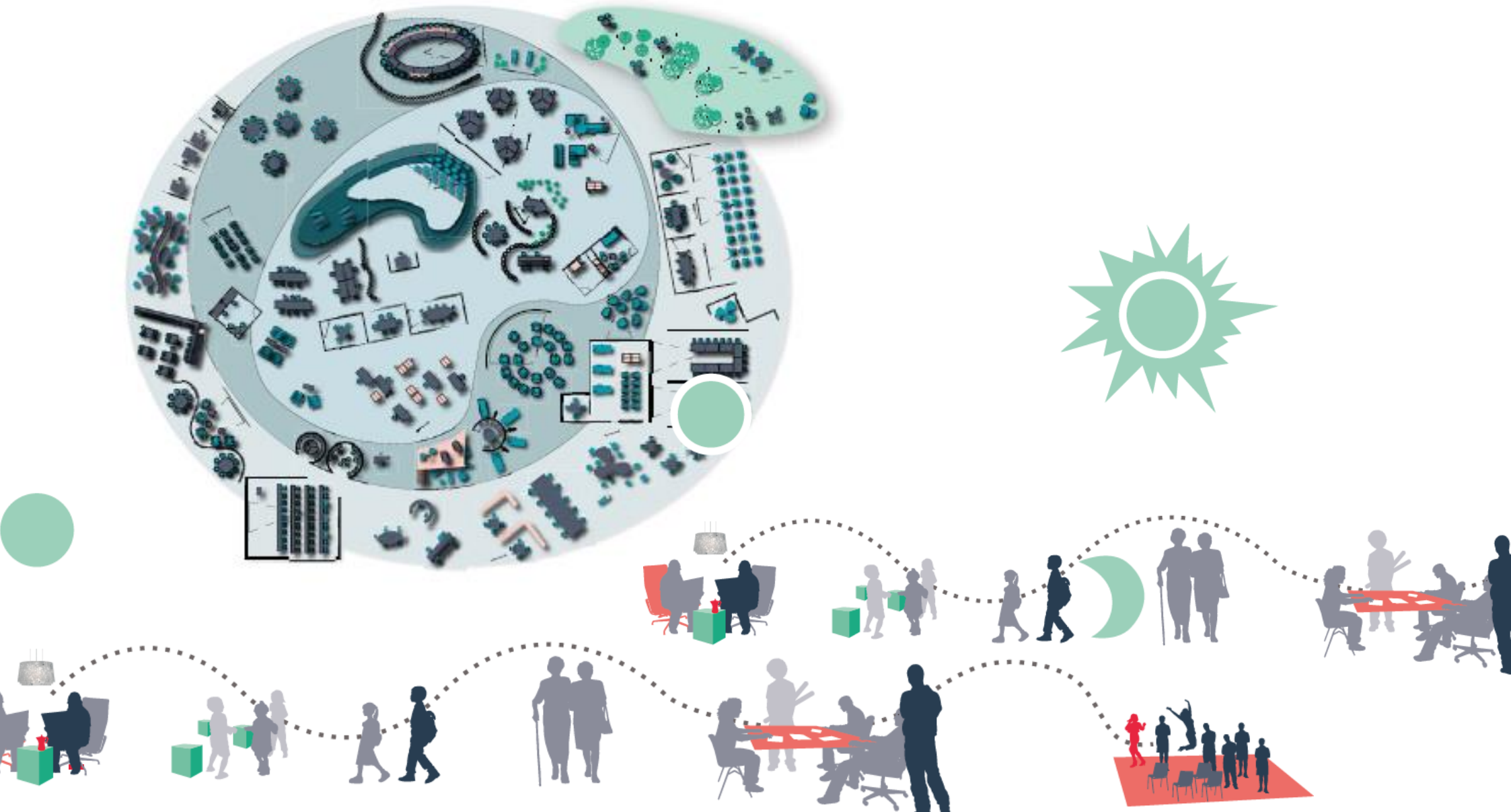
– OPEN CAMPUS GOES BOTH WAYS



OPPORTUNITIES WHEN SPACE & BEHAVIOUR IS CHALLENGED! **SIGNAL**

- From private owned areas to **FLEXIBLE, COMMUNAL AREAS**
- Creating surroundings that **ENCOURAGE INTERACTION AND AUTONOMY**
- From locked schemas to **ACTIVITY BASED DYNAMIC LEARNING**
- Creating physical surroundings that facilitate **DIVERSITY IN LEARNING AND TEACHING**
- Challenging locked habits and roles – where **SPACE IS USED AS A ‘TRAINING FIELD’ & WORK OUT ROOM FOR HOW WE LATER SHALL INTERACT IN SOCIETY**
- From manifesting static architecture to **PHYSICAL SURROUNDINGS THAT STAGE NEW TEACHING AND BEHAVIOUR** and optimally promote teaching and job satisfaction

ONE SCHOOL, ONE LOCAL AREA, 24 HOURS, MANY USERS... SIGNAL
LOTS OF OPPORTUNITIES TO CREATE BETTER LEARNING ENVIRONMENTS...



ALL WRAPPED UP IN OUR BOOKS....

SIGNAL



WWW.SIGNAL-ARKI.DK

SPACE MATTERS

SIGNAL