





# HOME BRIDGES THE WORLD

PROMISING DOMESTIC SCENARIOS IN RESPONSE TO THE COVID CRISIS



DIPARTIMENTO DI DESIGN

in collaboration with:





Scientific director: **Francesco Zurlo**, Full Professor, Strategic Design Expert

Lead researchers:

Daniela Maurer, Research Fellow,
Product Designer

Xue Pei, Post-doc Research Fellow,
Design Researcher

Illustration by: **Chiara Molinari**,
product designer & illustrator

This work was licensed with

Thanks to the contribution also from: Gianluca Carella, Silvia D'Ambrosio, Luca Fois, Mattia Italia and Michele Melazzini.

Published by: **Creative Industries Lab**, Design Department,
Politecnico di Milano

Creative Commons AttributionNonCommercial-NoDerivatives 4.0
International License.
To read a copy of the license go to the website: https://creativecommons.org/choose/results-one?license\_code=by-nc-nd&jurisdiction=&version=4.0&lang=en

CC (1) (S) (O) BY NC SA

cilab-design@polimi.it www.cilab.polimi.it

Follow us on:







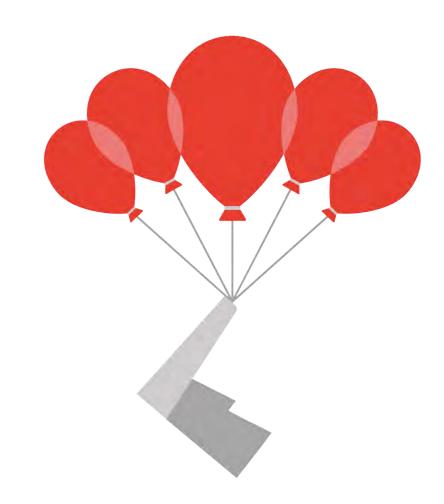








PROMISING DOMESTIC SCENARIOS IN RESPONSE TO THE COVID CRISIS



# CREATIVE INDUSTRIES LAB

CI.Lab is a research lab, within POLIMI – Department of Design, with a design approach: research to know, test to learn, take action to train, starting from the real needs of people. CILAB is a design lab in which the ways of thinking and actions converge dynamically for fostering scientific knowledge about strategic design.

It is represented by a network of professors, researchers and professionals that "travel" in design and creative industries galaxies, to provide added values for industries through design-driven innovation approach as leverage to grow. Which industries? First of all the Creative and Cultural Industries, but not only. Design-driven innovation represents a successful model for SMEs in all sectors.

# ABOUT THIS REPORT

This document is a first outcome of an ongoing research conducted by Creative Industries Lab (Cilab), a Design Research Lab of the Design Department at Politecnico di Milano. It addresses those who wish to understand how our homes have changed following the outbreak of the Covid-19 pandemic, and how this worldwide crisis could leverage our homes to play different roles in our daily life.

As designers and researchers, we would like to provide our contribution, along with others who are searching for solutions to deal with this pandemic. We started with people's needs and desires that emerged during this crisis especially in the domestic context, and translated them into promising directions where viable solutions could be defined to improve certain areas of people's lives.

Seven design-orienting scenarios of our home are presented as the preliminary result, which will be continuously developed during the forthcoming months with various other stakeholders to achieve practical and effective outcomes.

If you feel inspired by, curious about and interested in our work, keep in touch and contact us to discuss how we can share ideas and collaborate! We are looking forward to hearing from you!

# Index

The designer's perspective			
Background: life impacted by Covid-19			
WHY this research			
WHAT_Research Focus			
HOW_Our Approach			
Result of survey	25		
—— Bulding Design Scenario	32		
Scenarios of home in post Covid-19	34		
Tema 1_Working from home as normal	36		
Tema 2_Back to hands	44		
Tema 3_Collective entertainment at home	52		
Tema 4_Personal wellbeing at home	60		
Tema 5_Outdoor space is a must-to-have	68		
Tema 6_Keep virus outside home	76		

Tema 7_Cooperativism from home	84	
Summary Mapping	92	
Conclusions	96	
Trying to define the new normal	98	
Future steps and upcoming results	99	
References	100	
Appendix		

# THE DESIGNER'S PERSPECTIVE

12 \_\_\_\_\_\_ The designer's perspective \_\_\_\_\_\_ 13

# The designer's perspective

by Francesco Zurlo

A designer who dedicate to research has a different perspective.

This report tries to make sense of such perspective starting from the phenomenon that affected us all, namely the impact of the pandemic and the resulting quarantine, in everyone's daily life.

The process we followed is articulated as a qualitative research, which ultimately leads to possible scenarios, intended as triggers of creativity or as potential directions for the solution of (new) problems.

The sequence is simple:

- knowing, through a survey turned to a significant and varied target;
- understanding, an act that combines recurrent concepts emerging from research;
- interpreting, as moment of construction of meaning starting from the frameworks built by affinity in the previous step;
- transforming, to open a first planning and vision passage, towards the construction of sustainable and practicable scenarios;
- opening up, as moment of promotion and sharing of scenarios, available to designers, creatives and ordinary people, in order to bring ideas and possible solutions to the ground.

The report stops at the *transforming* phase and the whole initiative is to be read as a beta version which will be completed with specific project initiatives.

The research team highlighted 7 possible scenarios:

- \_working from home as normal: a situation experienced by many that led to adapting spaces, furnishings, lights, "stages", to be able to face this request with dignity (but also with a lot of authenticity);
- \_ back to hands: an interesting symmetry between availability of time and practical work, made with the hands, which brings with it, however, satisfactions of a different level, a sort of complacency of what one was not aware of knowing how to do; with consequences on spaces and furnishings;
- \_ collective entertainment at home: something more than multi-actor play on online platforms; a rethinking of the domestic space to welcome routines and pleasures of socialization: a challenge that neglects body and role of the senses, but which could activate unprecedented responses in terms of equipment and devices;
- \_ personal wellbeing at home: fitness and meditation, often online, from places designated for hearth and home, together with your trainer or yogi; the home as a wellbeing device looks like a new challenge for the people involved in the project;
- \_ keep virus outside home: the house as a place of protection and the threshold as a place for thought for the project; access gates to domesticity which can filter what is inside with what is outside and activate real changes in the person's status;
- \_ outdoor space is a must-to-have: at some point the facades of the buildings became transparent, with people at the windows, on the loggias, on the balconies, socializing with neighbors never greeted on the landing of the house; the design of the filter towards the outside in order to catch a piece of sky;
- \_ cooperativism from home: doing things together, enabled by someone and something, often bringing the

14 \_\_\_\_\_\_ The designer's perspective \_\_\_\_\_\_\_ 15

The contribution of design and of design research to science, society and culture is different.

most intimate corners of the home to the virtual square, for the joy of sharing.

#### Notes on design research

As mentioned, the contribution of design and of design research to science, society and culture is different.

To fully understand this difference, it suits to compare it with other perspectives: that of the business manager or that of the futurologist, for example.

We do not choose these references randomly. A famous business manager has been called to give directions to the government. Persons dealing with the future, moreover, have often been intercepted in different countries, to ask them what could have happened next.

So, let's take this comparison for good. To better understand and distinguish the

attitudes, approaches, epistemological and operational models of these experts.

In this perspective, we identified some categories that lead us to an attempt of taxonomy set on 5 labels.

#### 1. Mainly Focus On

The knowledge building models of these experts are different. The business manager is focused on how things are done. He is able, in a rational level, to put together limits, constraints, conditions and to propose a roadmap to achieve something. Futurologists explain us what will happen, sometimes with very engaging arguments; designers are formidable operators of meaning. Their goal is to critically anticipate situations. For the designer, criticism means to find the reason-why of a given solution.

#### 2. Nurture of Vision

A good business manager makes his own decisions on a defined dataset; these are "objective" decisions, undeniable. What must count, for him, is the consistency of the data and their accuracy. In addition to taking data into account, a futurologist takes care of detecting those weak signals that anticipate new behaviors. A designer brings his subjectivity into play by drawing from those

who seem the most significant to him. He operates as an antenna for weak signals emerging from society and culture.

#### 3. (relationship with) time

Typically, the business manager makes decisions using a "rear-view mirror", so almost always starting from the past, from consolidated data that allows him to make a precise choice; the futurologist interprets weak signals, emerging in technology, society, culture in the present, but with a constant tension towards the future. The designer considers the dimension of time complex. He freely circulates through present, past and future, trying to find recurring patterns. Furthermore, he considers myths as the recurrences of what is human, the most evident expression of this circularity, because in myths there are those invariants of humanity that are of the past, of the present and of the future. Not only that: he considers the flow of poets, artists and dreamers to be very important: their works, their thoughts influence the world for what it can be.

#### 4. Deliverables

Every time business managers have to share a strategic path, they create executive summaries: the plan of what needs to be done in order to achieve some specific results. Futurologists use narratives: storytelling, written and audiovisual, is an effective way to offer visions of the future world. However, these are often "saturated" stories, a little closed somehow. The designer's scenario, on the other hand, is an open work, since it offers the possible interpretations of other actors, part or not to the project, playing on the effect they cause. Also the scenario is peculiar: it is actual, in some way it considers aspects of technical feasibility and economic viability and mainly works on the dimension of meaning.

#### 5. Ways of Seeing

Seeing is an important ability, it allows you to catch those signals, sometimes very weak, that generate sustainable and practicable visions. In Greek, the verb "to see" has three different translations. In the Gospels (Jn 20: 1-8), the discovery of the empty tomb is narrated by John according to three distinct moments. At first Maria di Màgdala absently sees (blépei), then Simon Pietro sees and contemplates (theòrei), and at a third moment the

16 \_\_\_\_\_\_ The designer's perspective \_\_\_\_\_\_ 17

same evangelist, John, sees and believes (eidén). We are interested in this "intensity of seeing" because it is functional to the understanding of the mental model of our three experts. Maria's view seems to be that of the business manager: to distractedly see an inexplicable phenomenon because bias and situations of uncertainty cannot be part of this professional's universe of meaning; that of the futurologist who realizes the extent of the phenomenon but confines himself to contemplating it has more affinity with the seeing of Simon Peter; finally that of the designer who sees and believes seems to reflect Giovanni's eidén. What does it mean to see and believe from the creative point of view? To literally enter into the observed phenomenon and make it your own. Believing and creating overlap, because creating, as Eric Fromm explains, is "becoming" the very object of the creative act...

But it could also be another type of vision: Vilém Flusser, an intriguing philosopher who also worked on design, takes up another interesting concept related to seeing, citing a Jewish religious poet, Angelus Silesius: "the soul has two eyes: one looks at time passing, the other sends forth its gaze into eternity". Here too, two different ways of seeing: the designer has a sort of pineal eye ... "which is perceived and manipulated in the eternal. [...] In Mesopotamia, he was called a prophet. He is more deserving of the name of God. But thank God he is unaware of this and sees himself as a technician or artist. May God preserve him in this believe." 18

Therefore, the work we are presenting aims at being a small example of someone who considers himself a technician, perhaps a little artist. With the growing conviction that creativity is an inescapable keyword for the restart that involves and builds together solutions for a sustainable and responsible world for the post-pandemic.

#### FEATURES OF RESEARCH APPROACHES OF MANAGER, FUTUROLOGIST AND DESIGNER

	(mainly) focus on	nurture of vision	time	deliverables	ways of seeing
MANAGER	how	data	past	plans	blépei (absently sees)
FUTUROLOGIST	what	data, signals	present, future	stories	theòrei (sees and contemplates)
DESIGNER	why	data, signals, myths	past, present, future	scenarios	eìden (sees and believes)

... the growing conviction that creativity is an inescapable keyword for the restart ...

<sup>&</sup>lt;sup>18</sup>Vilém Flusser, Shape of Things: A Philosophy of Design, (ed. or. By Edith Flusser, New York, 2001) p.31

18 BACKGROUND

BACKGROUND \_\_\_\_

# **BACKGROUND Life impacted by Covid-19**

31 December 2019, Wuhan, China A cluster of cases of pneumonia was reported in Wuhan, Hubei Province. A novel coronavirus was eventually identified. 21 February 2020, Codogno, Italy The first official case of Covid-19 was acknowledged in Italy.

Starting in China, and then spreading to Italy, Europe and gradually to the whole world, this mysterious coronavirus is threatening people's health in a way that no one could have imagined. To contain the spreading of the virus, everyone was suddenly forced to stay at home, carrying out their daily lives totally within the four walls of a domestic setting.

Alone, with family, or with friends and roommates. This has already been considered one of the most challenging social experiments in human history.

Whether with someone or alone, each of us has experienced this new lifestyle that has entirely unfolded in domestic spaces for an unprecedented length of time, during which we have carried out a multitude of activities as never before. The lockdown has turned homes into safe shelters where we live 24 hours a day, 7 days a week, working, entertaining, socializing and interacting in different ways with others. This leads us to reform our daily behaviour and strategies (either consciously or not) that have affected how we exploited the domestic spaces of our "world@home", as well as how our lives are returning to a "new normal".

Most of us are aware that we cannot go back to the "normal" life we led before the pandemic, and a new definition of what a normal life is could be formulated from diverse perspectives. However, the situation we experienced offered us an exceptional opportunity to perceive signs and evidence of what that new normal would look like.

Particularly, our homes have become small experimental workshops where we face several challenges, experience new situations, seek possible solutions, reflect on what could be done better and make improvements, one step at a time. Each of us is a curious but discreet observer of both ourselves and the new social transformation, which commenced in our own homes.

# WHY this research

To better **know** and **understand emerging needs** (especially in the domestic context) generated by the Covid-19 outbreak through information directly obtained from users. However, this is the starting point of the study, whose core objective reaches beyond.

To **interpret** existing situations and to **transform** them into promising visions of our homes in the near future.

The research does not only present how people are dealing with difficulties and challenges at home. It aims at offering potential visions, based on miscellaneous information collected (from users, markets, social movement and technology), to guide people and companies in shaping hearts, minds and hands collaboratively.

To **initiate conversations** on collaboration for new proposals, solutions and practices people could benefit from for a longer period. The research will use Design Scenario as a platform to involve various actors in thinking and making concrete design results during the second phase.

The outcome will be **design-oriented visions** defined by balancing what users need now and what a possible future will look like. The approach is radical but not unrealistic. We could call it a designerly way<sup>2</sup> of forming insights on what could be the new normal at home.

# WHAT Research focus

#### 1. HOME in the core

Countries (e.g., Italy and China) seriously affected by Covid-19 enforced a strict lockdown throughout the nation. People basically stayed at home 24 hours a day for more than 2 months. Home became their whole universe. Many activities we previously performed outside had to be done at home, with the subsequent need for new functions in the domestic environment and new ways of interacting/behaving.

We saw changes implemented in every home, and we invited everybody to observe what was happening within the domestic walls. We believe that these changes at home definitely have an impact on all other aspects of our society, e.g., public spaces and transportation, consumption models and so on.

Many journal articles, research groups and individual designers and architects (e.g., Dezeen<sup>3</sup> and New York Times<sup>4</sup>) are talking about the new roles of our homes in this crisis. We are encouraged by the fact that the scope of our research is shared by many others, and this further confirms interest in analyzing the issue.

#### 2. A Research-Through-Design (RTD) approach

This study has been led by a group of design researchers, who intuitively look at everything from a design mindset and with a design attitude. The research process itself is a design process to collect, interpret, and make sense of collected data to visualize and envision the scenario In the near future.

22 \_\_\_\_\_\_ WHAT\_research focus \_\_\_\_\_\_ 23

#### 3. Human-Centered/Person-Centered

We started from people, from basic needs and situations experienced by each of us. The 7 themes were generated on the basis of a number of issues identified by people who responded to our survey. Hence, unlike certain studies that start from a professional or expert perspective, we first paid attention to and empathized with users, every one of us.

<sup>3</sup>https://www.dezeen.com/2020/06/04/future-home-form-follows-infection-coronavirus-michelle-ogundehin/?fbclid=IwAR1hAA0hrF-4CtxN4jYiJ1fk9L9U8fJ8XDSnuHIrT\_ VP7lacie9H3kgms2V

# HOW Our Approach

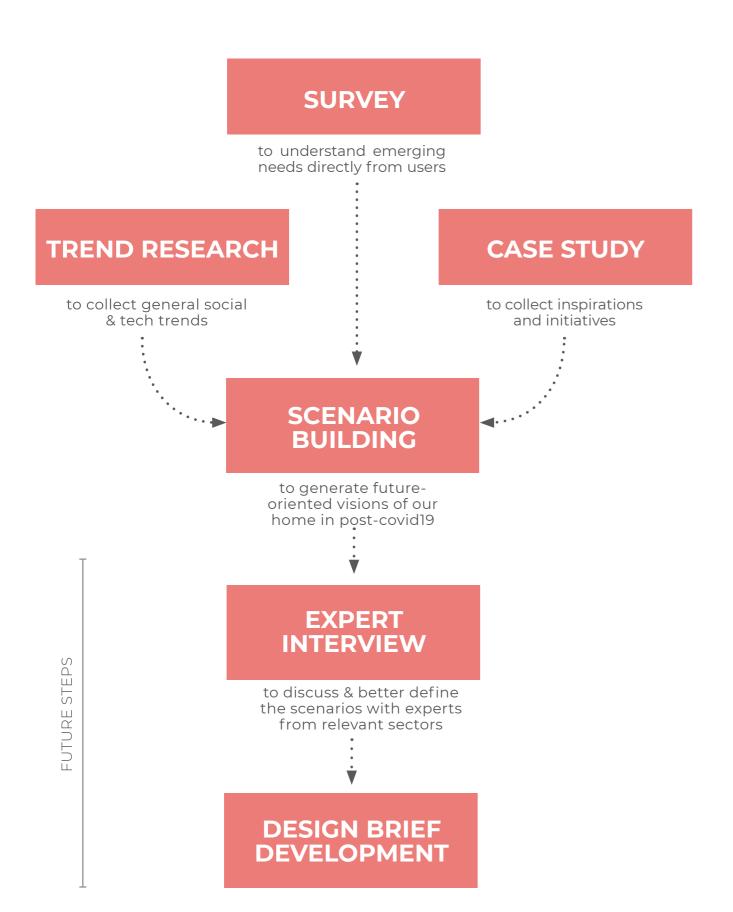
The research design envisages the following steps:

- **1. Survey**: human-centered approach, starting from user' needs and desire
- 2. building design scenario: collect other types of data (initial ideas, social and tech trends, marketing reports, etc.) to design new scenarios that could visually present some future-oriented visions of our homes after the Covid-19 pandemic, with new lifestyles and behavioural patterns that have been gradually formed;
- **3. interviews with experts**: develop detailed design opportunities together with experts from different backgrounds based on the Design Scenarios;
- **4. develop design briefs**: collaborate with companies to define business opportunities underpinned by the Design Scenarios:
- 5. new design proposals on products, services and systems: collaborate with designers to eventually develop design solutions and proposals that represent the "new normal" with tangible touchpoints and intangible experiences and systems

This approach is formulated by integrating both qualitative and quantitative research methods. Above all, it includes methods and tools that are often used in strategic design processes with the final goal of proposing solutions that not only consider what should be but also disclose the reason behind it.

<sup>4</sup>https://reasonstobecheerful.world/social-distancing-architecture-coronavirus/?fbclid=IwARI JF42GG8fH270QQ2TJFNo-w-aJOF61utFpH-8eVGYyui50PDZFHurc6C8

24 \_\_\_\_\_\_ HOW\_our approach result of survey \_\_\_\_\_\_ 25



1 survey42 questions6 sections337 participants12 days

#### **RESULT OF SURVEY**

Due to the restrictions established by the lockdown, it was very difficult to plan either in-person interviews or direct observation activities. Therefore, we conducted an online survey aimed at collecting as much data as possible from a miscellaneous population in terms of age and profession.

We designed this survey with 42 questions, divided into 6 sections:

- 1. Basic information;
- 2. Life during quarantine: to understand how people experienced being restricted at home during the lockdown;
- 3. Typology of domestic living spaces: to understand how people conducted their 24-hour activities at home;
- 4. Work and study situation: to understand the remote working/studying experience of workers and students;
- 5. Necessary activities: to understand how people managed issues related to keeping the house virus-free, maintaining/cleaning the house and purchasing food;
- 6. Free Time: to identify emerging domestic entertainment activities and how people are maintaining social relationships.

Data were collected over the period 23 April-4 May 2020, acquiring answers from **337** people (**290** living in Italy, and **47** from countries all over the world).

26 \_\_\_\_\_\_ result of survey \_\_\_\_\_\_ 27

**47,2%** are 19 – 35 years old

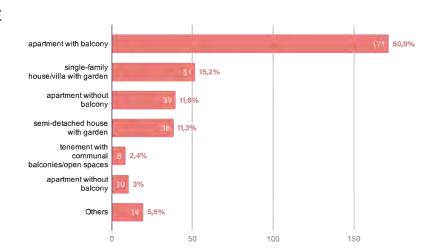
**68,5%** are female

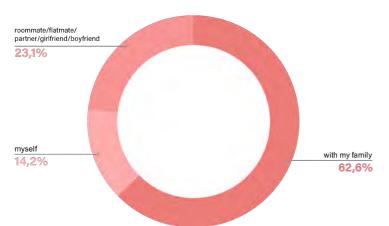
**32,8%** are working in the sector that relevant to creativity.

#### **% TYPES OF HOUSE**

**85,4%** lived in a house (flat, detached house, single house) with **Outdoor space** 

(balcony, terrace, garden, rooftop)



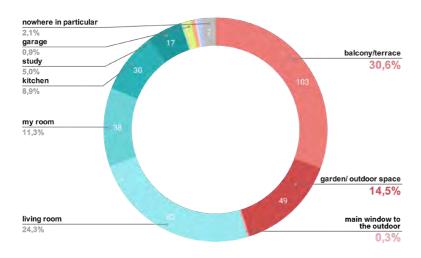


#### % LIVE WITH WHOM

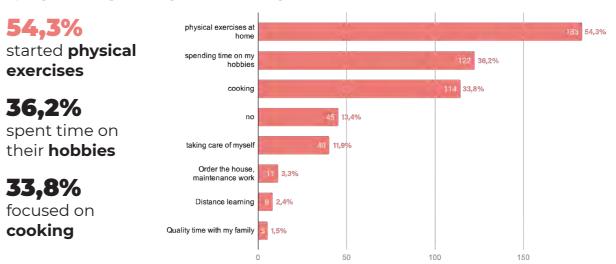
**85,8%** lived with family, relatives, roommates or friends during the lockdown period, while **14,2%** went through it **alone**.

## % WHERE TO SPENT TIME AT HOME

During the lockdown, around half of the people, 45.3%, spent most of their time in **Outdoor Spaces** (balcony, terrace, garden, space near window).



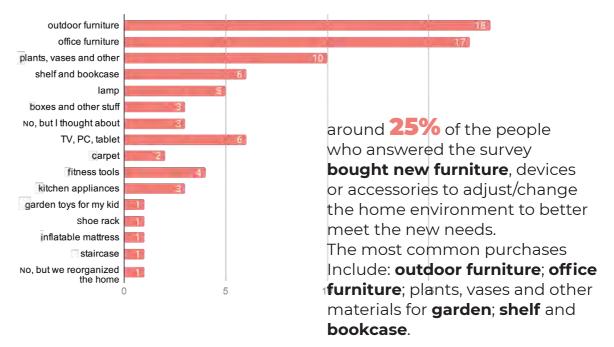
#### % ACTIVITIES PERFORMED AT HOME



#### **%DIFFICULTIES**

Regarding domestic space, people found it most difficult to make the same space/furniture meet the requirements of different needs/activities(24,9%); to organize and to share the space with other people they lived with(16,5%) and to guarantee privacy(7,5%).

#### **NEW PURCHASES**



28 \_\_\_\_\_\_ result of survey \_\_\_\_\_\_ 29

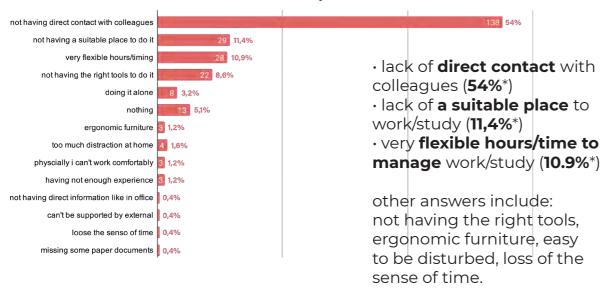
#### **BASIC INFORMATION ON WORKING FROM HOME**

**75,6%** are currently working/studying from home

**52,5%** of them work/study online more than **6 hours** a day

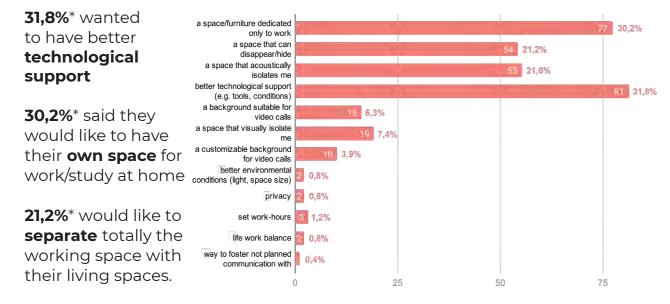
**60%** of them have their own isolated space, while the other **40%** have to share the same space with others at home.

#### % DIFFICULTIES OF SMART WORKING/DISTANCE LEARNING



#### **% ISPIRATIONS**

People expressed their opinions and preferences concerning Work From Home and how they would like to continue this new working model:



<sup>\*</sup>This represents the percentage of all the people who answered this question (not of all participants in the survey).

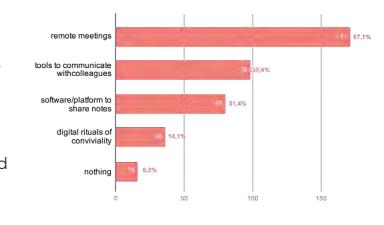
#### % ACTIVTIES CONTINUE TO DO

(67,1%\*)
new communication
tools among colleagues
(38,4%\*)
software to share tasks
and notes for work
(31,4%\*)
are the three most voted
items people would like

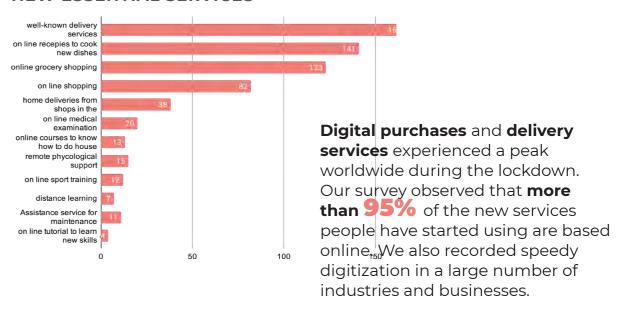
to go on having in the

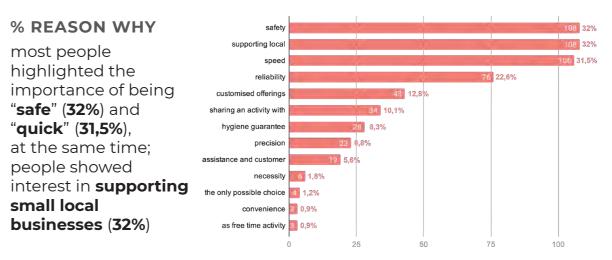
future.

Remote meetings



#### **NEW ESSENTIAL SERVICES**

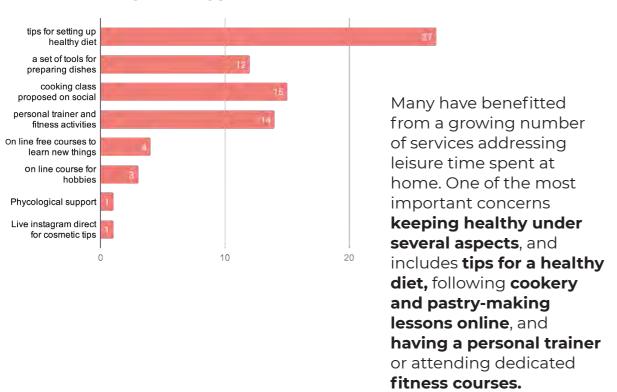




<sup>\*</sup>This represents the percentage of all the people who answered this question (not of all participants in the survey).

30 \_\_\_\_\_\_ result of survey \_\_\_\_\_\_ 31

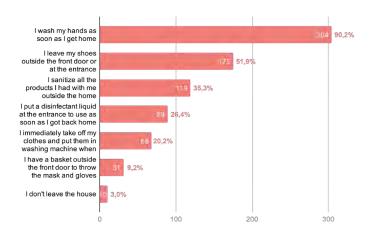
#### **BENEFIT NEW OFFERINGS**

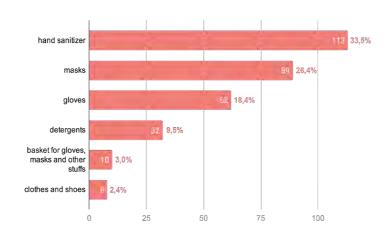


#### **KEEP VIRUS OUTSIDE HOME**

Washing hands was the most diffused way (90,2%), followed by leaving shoes outside (51,9%) and sanitizing all the products when arrived home (35,3%).

People also reorganized and adapted their home entrance to their new needs: **33,5%** placed a **hand sanitizer**; **26,4%** allocated a specific **place for face masks** and **18,4%** made room for **gloves**.



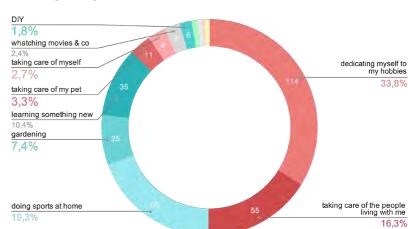


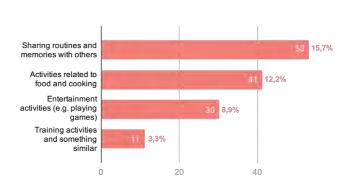
#### **ENTERTAINMENT ACTIVITIES IN SPARE TIME**

Three main activities are:

- · spend time on
- my hobbies (34%)
   taking care of
  myself or of people
  living with me or
- perform fitness training at home (20,1%)

of my pets (22,2%)





#### % NEW RITUAL AT HOME

The most chosen of the new rituals at home is remaining connected and sharing among families, relatives and friends (15,7%).
This was followed by activities centred on food and cooking (12,2%), e.g. cooking together, sharing recipes, digital happy hour.

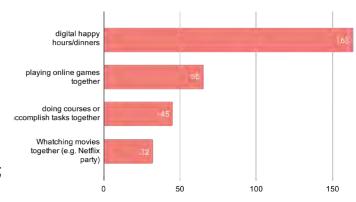
#### **KEEP RELATIONSHIPS**

Besides the most common answers, some interesting ones include:

- telling the granddaughter stories;
- organizing theme meetings;
- · remote gardening;
- sharing photos, information, book/ movie/music suggestions;



 sharing prayer programmes.



32 \_\_\_\_\_\_ Scenario building \_\_\_\_\_\_ 3

#### **BUILDING DESIGN SCENARIO**

We have used data collected during the survey to create practical visions, which can be shared with different audiences and stakeholders to initiate conversations about "What will our home be like?" and "Where are the new opportunities for designers?"

Design Scenario<sup>5</sup>

Scenarios are stories about the future that cannot be clearly foreseen; however, their purpose is to make decisions today. Scenarios are not based on probability but on qualitative data and analysis. Uncertainty is part of this method, which builds different pathways to the near future through storytelling. A Design Scenario reaches beyond, showing clear motivation (why) and illustrating the concrete actions required for practical implementation. It often acts as a "platform" to set up the conversation through visually presented visions and insights of possible futures.

In this research, design scenarios (at this phase) have been built by **analyzing** data collected on users' needs and wants, **synthesizing** them into 7 key themes that define new visions of our home in the near future and, finally, **identifying** promising design opportunities in each vision (scenario). We also verified our scenarios with emerging social, economic and technological trends identified by leading trend research agencies and institutions, as well as by looking into best practices and initiative cases proposed by companies or by people themselves in this particular period.

Each Scenario is designed to present a specific vision of "HOME" through these factors:

- issues identified from users' NEEDS & WANTS: presenting issues that are synthesized from studying and analyzing survey results;
- **HMW question**: defining a clearer exploration direction under one specific theme;
- **key features**: defining essential and unique features the scenario must have in order to achieve the goal/motivation;
- relevant social trends: emerging trends that confirm or correspond to the scenario;
- **inspiring initiatives**: initial ideas, concepts, solutions from the public and business that could contribute to building a possible solution in the scenario;
- **impacted sectors**: identifying sectors that could be impacted by this scenario;
- design opportunities: presenting gaps and creating possible opportunities to propose new design or business solutions;
- **digitization and technology**: highlighting "Digitization as a prerequisite". The lockdown confirmed and enhanced the importance of digitization, and the need to accelerate its implementation as an essential part for every aspect of our daily life, especially for the domestic environment. Technology providers are implementing solutions that integrate technology into the environment: lot, AI, voice assistance devices are designed to support daily life, rather than be invasive, in a **phygital** perspective that blends digital and physical dimensions.<sup>6</sup>

<sup>&</sup>lt;sup>5</sup>These 7 scenarios, at a relatively general level, are created to explore and describe promising innovations involving a set of relevant actions and actors (Manzini, Design Oriented Scenario, 2009). They are not as yet scenarios that could lead to specific design concepts or projects. <sup>6</sup>PSFK (2017), Home Debrief\_Make the connected home more human.

# SCENARIOS OF HOME IN POST-COVID19

# WORKING FROM HOME AS NORMAL

NEEDS AND USER HINTS (data from survey)	ISSUES		THEMATIC VISION	
a space that isolates acoustically and visually space / furniture dedicated only to work / study a space to concentrate / privacy adequate technological tools ergonomic furniture	COMFORT AND FUNCTIONALITY	TAN		
space that can disappear at the end of the work / study activity	ADAPTIVE SPACE	TANGIBLE		
a suitable background for videocalls a customizable video call background	WORKSPACE PRESENTABLE TO THE OUTSIDE WORLD		WORKING FROM	
need direct contact with other people	KEEPING RELATIONSHIP WITH COLLEAGUES		HOME AS NORMAL	
digital rituals of conviviality with colleagues/ classmates	MISSING THE INFORMAL MEETING OCCASIONS	INTANGIB		
life work balance fixed work schedule	RIGHT WORK LIFE BALANCE	BLE		

# **WORKING FROM HOME AS NORMAL**

During the lockdown period, home became where we conducted almost all our professional working activities. We had to set up our workstation at home to carry out our work efficiently, as we did in the office. However, we daily discovered new challenges and difficulties in this working-from-home context.

Conflicts between working and parenting, work-life balance, and managing all work-related calls in the same space as other people. Each of us is seeking a customized solution to adapt to this big change and transform the home into a better place for work.

A survey conducted by the MIT<sup>7</sup> found that **almost half** of the Americans are now working from home. And, **75.6%** of participants in our survey are working from home, 52.5% of whom work more than 6 hours a day.

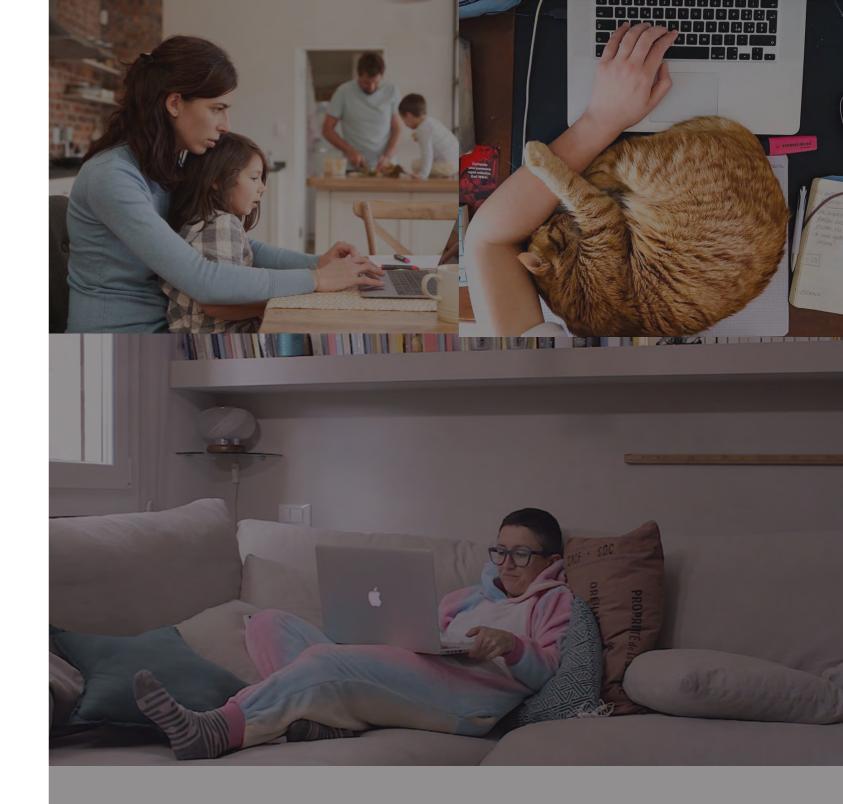
#### **NEEDS & NEW BEHAVIORS FROM PEOPLE**

(survey-based data)

**54%** of people working from home in our survey said that not having direct contact with colleagues is one of the most difficult aspects of remote working, followed by the 11.4% that was concerned about not having a suitable place to work in.

Needs emerging from the survey are categorized into two main groups, namely **tangible** and **intangible** issues. Tangible issues are related to the features of the space where people work, while intangible issues concern relationships with colleagues (also the feeling of belonging) as well as with people who are living together in the same house.

75,6% working from home



working from home underlined tangible and intangible needs

#### **Tangible**

- need of an adaptive space
- need of a workspace presentable to the

#### <u>Intangible</u>

- keeping the relationship with colleagues
- missing the informal meeting occasions
- (e.g. coffee break)
- keeping the right work/life balance

#### **SCENARIO 1**

# How Might We create an adaptive work experience at home that enables us to make the most of working from home?



#### **KEY FEATURES**

- Professional and smart working furniture/ products are entering homes with a "homefriendly" visual language/feeling.
- **personalized supporter** to organize my work-related tasks:
  - providing options to isolate me from the other parts of the home (both visual and auditory), and to connect with others (e.g., kids) according to my needs;
  - customized work environment and routine (e.g., professional stage/set; integrate my work schedule with my life schedule at home);
  - support in maintaining the right work-life balance (e.g., lights on/off when I exceed my working hours).
- Not only for one person nor only for work:

   a work island can host various activities, not solely work OR home-related tasks; it can convert any space into a work island.
- Support to maintain connections with my colleagues (physically and virtually).

Organizations are decentralizing their HeadQuarter exploiting coworking spaces for physical meetings

Regus

Twitter announces employees will be allowed to work from home 'forever' 12 May 2020

#### **DESIGN OPPORTUNITIES**

### CONSULTING SERVICE TO BUILD UP YOUR HOME OFFICE

a consultant that partners companies in providing customized solutions for employees to build their home office (B2B2C).

#### MODULARIZED "WORKING ISLAND"

a work island (combining space and furniture) that could adapt to different home spaces (*living room*, bedroom, kitchen, even the balcony).

#### **DESIGN SOLUTION FOR SPACE DIVISION**

furniture now has the additional function of separating, combining, isolating or connecting various spaces at home, offering people the option of concentrating on one task or supporting them in dealing with multiple tasks.

### NEW RITUALS IN YOUR WORKING ROUTINE

a new system to manage employees regarding their personalized work-related rituals/schedules (e.g., no more standard working hours for all; planned physical or virtual teambuilding activities with colleagues).

#### Impacted Industries



**FURNITURE** (product or service)



INTERIOR DESIGN



**CLOTHES** 



HOME DECORATION

#### **INSPIRING INITIATIVE**



COORS LIGHT/ Make your clone and sneak away
Clone machine tool to help people sneak out of video meetings

From tips of "how to transform your house into your office" provided by IKEA through its social channels, to "your office kit", including adhesive pictures of colleagues, a pyjama suit that is perfect for a call from bed, and even an app to "make your clone and sneak away" from the call without being noticed, small and big companies and users themselves experienced many projects and initiatives to face the sudden remote working situation at home during the lockdown.



IKEA / Start From Home
Easy tips to transform/adapt your home space
in a work space
#nopjiama #furnituretips



Work From Home Jammies
Japanese pjiama for ready to do call
#nopjiama #readyforthecall

# Digitalization & Technology

>

Smart work systems will develop along with smart home systems, accommodating individuals' work&life needs through learned preferences and setting up tailored assistance.

>

Technology used to provide immersive experiences will enter homes to create an adapted work environment by using contextually-aware assistants.

>

Third party assistance will be provided for work-related needs to encourage the adoption and formulation of better working from home habits.

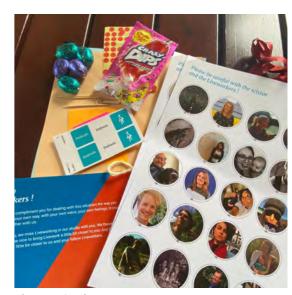
# Who is talking about this trend

"Working from home doesn't work well for everyone. In certain cases, it's creating and exposing new divides: divides in types of living setups, divides in the ways people and organizations get work done, and divides in our individual needs for social interaction"

Bridging the New Divides, McKinsey May 19, 2020



STYKKA / #StayTheFuckHome Desk simple flat-pack workstation that can be easily assembled out of three pieces of folded cardboard #temporaryfurniture



**LiveWork Kit**Home Kit to feel close to your colleagues
#teammate #likeintheoffic

# **BACK TO HANDS**

NEEDS AND USER HINTS (data from survey)	ISSUES	THEMATIC VISION
<ul> <li>purchase of plants and materials for cultivating and gardening</li> <li>on line course for gardening</li> </ul>	——————————————————————————————————————	
<ul> <li>search for recipes online to cook new dishes</li> <li>cooking class proposed on social</li> <li>purchase of a set of tools for preparing dishes</li> </ul>	COOKING	BACK TO HANDS
<ul> <li>purchase of containers and storage for house tidying</li> <li>online courses to learn how to do house maintenance</li> </ul>	MAINTANING THE HOUSE	

### **BACK TO HANDS**

We started spending 24 hours at home and, fortunately, more time with our families and the people we live with in the house. Our home has become a place we are figuring out, or even where we are inventing things to do. Tired of spending hours at the computer, we prefer to get our hands dirty and to learn things by doing. The passion of fixing things, building small items and learning to prepare a specific dish is back. We finally have time to hear and fulfil our much concealed willingness to try, to make mistakes and to fail, the curiosity to discover, to experience, to grow and to improve. We are discovering, once again, the satisfaction of building something with our own strength, and the quality and value of our time.

#### **NEEDS & NEW BEHAVIORS FROM PEOPLE**

(survey-based data)

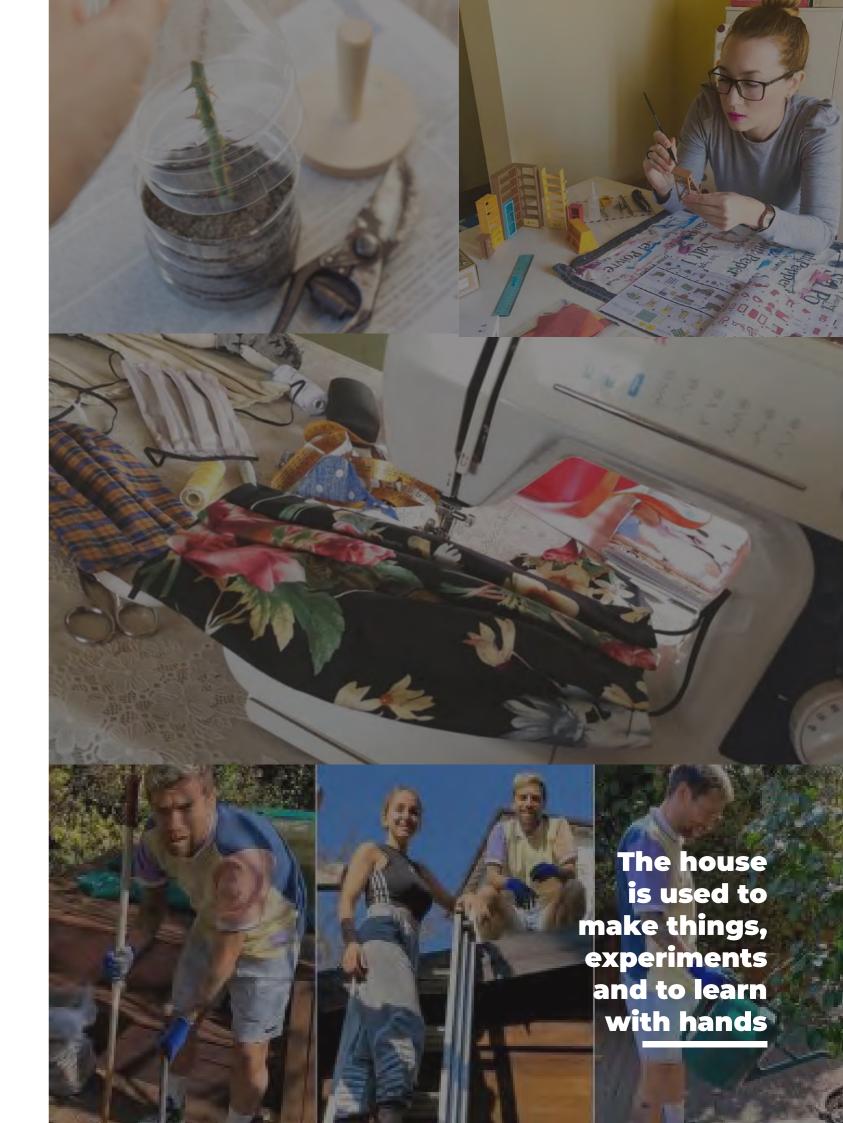
**35%** of people participating in our survey said they started spending more time on hobbies during the lockdown.

**34%** spent time on activities related to food and cooking and, interestingly, **7.4%** dedicated themselves to gardening; **2%** carried out home maintenance and tidying activities.

#### Issues

- · cultivating and gardening
- cooking
- maintaining the house

around 35% spend their time on hobbies



#### **SCENARIO 2**

# How Might We recreate our home as a laboratory to learn and do things with our hands?



#### **KEY FEATURES**

- A supportive space that includes both physical and digital equipment.
- Easy to clean up/maintain/return back to scratch.
- Adaptable and transformative for different handon activities.

#### **DESIGN OPPORTUNITIES**

# FROM PROFESSIONALS TO ADVISORS

organizations or professionals specialized in a specific topic (Brico/Leroy Merlin, plumbers, woodworkers, bakers ...) become counsellors that offer personalized remote consultancy/tutoring services for people to learn or just have a try.

# KIT/ASSISTANT OFFERS (DIGITAL & PHYSICAL)

less product-oriented purchase, more kit/assistantoriented offers for people, studied to support learning by doing.

# A PHYSICAL "LABORATORY" AT HOME

design of a specific dedicated space for DIY activities supplied with all the necessary tools and technologies, either private (at home) or shared (with neighbours, if situated in a social housing context.

#### **MODULARIZED FURNITURE**

furniture may be partly repaired/changed/ customized. This offers people the opportunity to actively participate in making personalized furniture at home.

#### Impacted Industries



FOOD&COOKING



**DELIVERY** 



**FURNITURE** 



DOMESTIC APPLIANCES



**DIY COMPANIES** (e.g. Leory Merlin)

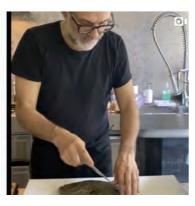
#### Top 10 DIY Searches on Google - April 2020

Position	Search Term 'How to'	Increa	se in searches on Google since last year (compared to April 2019)
1	Tile around a window	+7,300%	
2	Re-grout tiles	+7,100%	
3	Change a light fixture	+6,300%	
4	Remove mould from walls	+4,700%	
5	Fit an electric shower	+4,300%	According to the stats,
6	Make a fire pit	+3,900%	researches on Google abou
7	Remove skirting boards	+3,800%	DIY/Maintenance have
8	Paint kitchen cupboards	+3,500%	
9	Paint floorboards	+164%	reported a considerable
10	Slate a roof	+95%	increase compared to the same period last year.

#### **INSPIRING INITIATIVE**







**BOTTURA Kitchen Quarantine**Video instruction by the famous chef for cooking together #cookinglikeachef

The rise of DIY is confirmed by several initiatives both from companies and individuals, like influencers and chefs.

The 3-star Chef Massimo Bottura made his début with a Web series entitled 'Kitchen Quarantine' on Instagram a few days after the Italian lockdown commenced, narrating home adventures in the kitchen of the Modenese cook and his family.

Leroy Merlin, instead, offered many tutorials on building various items either alone or with kids, promoting the slogan "what to do at home".

Finally, for the most nostalgic of an IKEA Sunday tour, the company shared the recipe of its famous meatballs at home.

The growing interest in DIY activities can also be observed by the rising sales of smart home garden devices during the lockdown, and by analyzing researches on Google for DIY, which report a considerable increase, compared to the same period last year.



**LEROY MERLIN / What to do at home** Instagram tutorial to build toys, furniture and other things while at home #homemade #diy



**CLIK and GROW smart garden**Indoor garden to grow plants and vegetables have increased their sales during the lockdown time
#smartgarden #indoorgardening

# Digitalization & Technology

>

Technology will support the improved professional standard of domestic appliances at a friendly price. It will also support user activities through learned preferences and tailored assistance

>

The 3D printer for miscellaneous sectors (e.g., food, clothes) is rapidly entering the home.

>

Conversational interfaces integrated in a smart home system could help tutoring and supportive DIY activities.

>

Virtual and augmented reality will create a lab experience and help to fulfil the tasks smoothly.

# Who is talking about this trend

"Home isolation gives rise to increased DIY and home improvement projects" Untangling the Future, NextAtlas April 16, 2020

"People spend more than ever before on gardening and DIY items" Paylead, March 26, 2020



**IKEA / Meatballs at home**Instructions for homemade Ikea Meatballs
#doyourselfwhatusuallypurchase #homemade

# **COLLECTIVE ENTERTAINMENT AT HOME**

**NEEDS AND USER HINTS (data from survey) ISSUES THEMATIC VISION** 

- digital happy hours with friends and relatives
- played online games
- courses of accomplishing tasks together (remotely)
- watched movies together remotely
- sharing routines and memories
- cooking related activities (remotely)
- courses of accomplishing tasks together (phisically)cooking related activities (phisically)

_	DIGITAL ENTERTAINMENT
_	PHYSICAL ENTERTAINMENT

**COLLECTIVE ENTERTAINMENT AT HOME** 

# COLLECTIVE ENTERTAINMENT AT HOME

During quarantine, we miss going to the cinema with families, having a drink with colleagues after work outside the office, and spending time with friends on some common hobbies and interests. Physically staying at home makes all these entertainment activities impossible; however, bottom-up initiatives connecting people, both digitally and physically, are experiencing a boom in this period.

We start planning various activities at home in an attempt to fill our spare time and to interact with those who are living with us. Video calls to eat, drink, sing, dance and play together are organized every second all over the world, thus unintentionally becoming a new part of our daily routine.

In the future, would you prefer to go out with friends for a huge concert in a crowd or would you rather gather a small group of friends at home to "digitally participate" in the online concert with your food and drinks at home?

An increasing number of options and possibilities will reshape our entertainment behaviour

#### **NEEDS & NEW BEHAVIORS FROM PEOPLE**

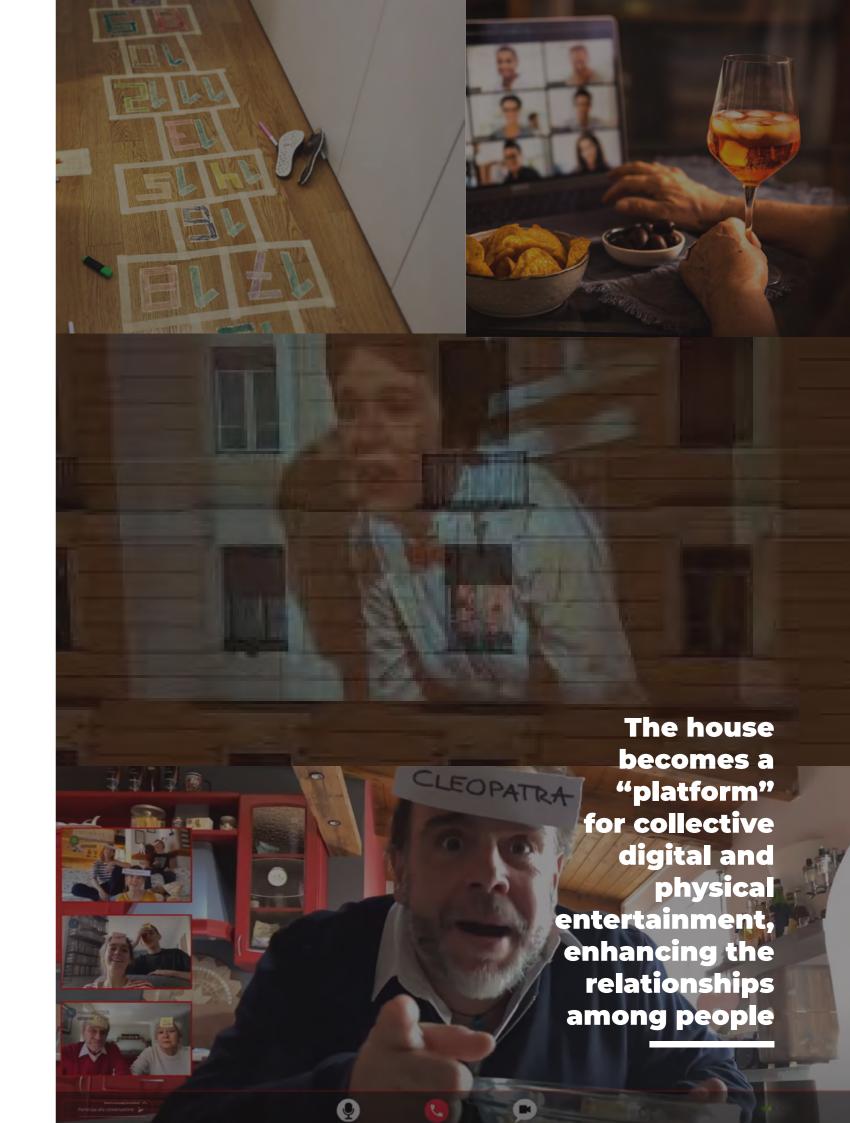
(survey-based data)

**48%** of people said they experienced digital happy hours with friends and relatives; **20%** played online games with friends or relatives; **13,3%** attended courses entailing the completion of tasks together (either online or with the persons they lived with); **9%** watched movies together online with friends or relatives.

It is interesting to notice that people have either discovered or invented new activities or rituals to feel close to others and to maintain social relations. **39.2%** of these activities are related to sharing routines and memories, and **30.3%** concern cooking (cooking together either in person or online).

All these activities could be categorized into:

- Digital entertainment
- Physical entertainment



#### **SCENARIO 3**

# **How Might We recreate** previous outdoor entertainment experiences in the home context?



#### **KEY FEATURES**

- a good mix/integration of digital connection and physical interaction
- have options to decide my "own" experience - more than on-demand: choose and decide when, how and with whom.
- · easily and freely switch between digital and physical channels/accesses
- convenient and fast-to-have

#### **DESIGN OPPORTUNITIES**

#### **HOME PARTY 4.0**

Experience design of events @home (e.g., home restaurant, home theatre/cinema, home concerts, home kids play party; participants could be digitally connected or physically get-together in a small group at home).

Everything you need to build up to hold a party at home could be fully arranged by a complete offerina.

#### **PHYGITAL PLATFORM**

The physical surface at home could be the touchpoint of an integrated smart system. The home itself becomes the platform/device for the entertainment experience (walls, floor, furniture, etc.).

#### WHAT PEOPLE SAY

"We did a remote cooking challenge called Covid-Chef with friends"

"I put music on the balcony for the neighborhood"

"Me and my kids learn to cook together traditional recepies, like the Gnocchi and Orecchiette"

"We played traditional collective games via call, like Raffle"

#### **Digitalization & Technology**

Technology will facilitate "quality time" by creating synchronized virtual experiences that connect people from various locations and platforms.

Technology will allow and maintain a remote presence that proactively and naturally interacts with others living in the home.

Integrated technology for furniture and also for home infrastructure.

#### **Impacted Industries**



**FOOD** 



**ENTERTAINMENT** 



**FURNITURE** 

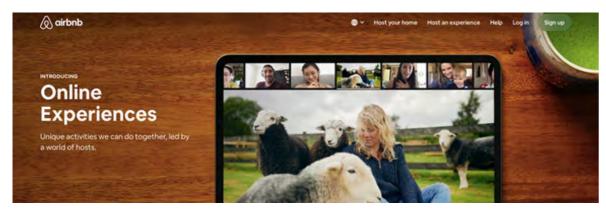


**SMART HOME** & DOMESTIC **APPLIANCES** 



HOME **INFRASTRUCTURE** 

#### **INSPIRING INITIATIVE**



AIRBNB Online Experiences
Online experiences offered by airbnb hosts

Entertainment has become a trending topic for the emergence of services and experiences offered worldwide during the lockdown, aimed at making it necessary for people to conceive a new way of building relationships (both physically and digitally).

Existing platforms for digital entertainment improved experiences by adding a "party feature" that allows to chat and comment live while watching the same movies with remote friends/relatives.

A famous German Club for electronic music launched a 48-hour online disco event, with dedicated design of the digital space and experience, by partnering a Web designer (the dance floor, the wardrobe, the toilet, the bar and even the queue for the entrance were designed).

Couples physically divided by the lockdown experienced a digital customized serenade with the service of a real Mariachi musician. While for kids (and the survival of their parents), IKEA offered a series of tips to transform home corners and existing furniture into perfect playgrounds.



#### **NETFLIX / Party Extension**

An extension that able live chatting while watching the same movie of your friends #whatching&chatting #remotelytogether



**CLUB QUARANTANE** 

German Club started to organise exclusive online parties
#exclusive #virtualclub

# Who is talking about this trend

"Streaming parties through apps like House Party, cocktails with friends or communal meals on Zoom, we are all trying to find ways of connecting to others while staying safe and distant from each other. Regardless of the inconveniences, social interactions have moved online and may probably stick to the digital realm for a while."

Untangling the Future, NextAtlas April 16, 2020 "Immersive new technologies mean that people can increasingly get their experience-based status fixes from virtual experiences. Social media and esports are the obvious manifestations of how consumers accrue status in the virtual realm."

Virtual Expereince Economy, Trendwatching April, 2020



**VIRTUAL MARIACHI**Digital customized serenade
#serenade



IKEA / restart from home Easy tips to transform/adapt your home space in a playground for kids #homeplayground #furnituretips

• psychological support services

# PERSONAL WELLBEING AT HOME

• physical exercises at home
• online services for setting up healthy diet
• online services for personal training and fitness activities
• online services for mindfulness courses

PHYSICAL WELLBEING
taking care of body and physique

PERSONAL
WELLBEING
AT HOME

taking care of mind and soul

# PERSONAL WELLBEING AT HOME

In the Cambridge dictionary, the meaning of "home" is always related to "care", where we give and receive care to recover, recharge and relax. More than ever, this is a moment to concentrate on ourselves at home. My home is the "care-centre" of my own body and mind. During the extensive period spent at home, we finally had time to look at ourselves, listen and feel our own needs and aspirations. We have to make better use of our home to take care of ourselves and stay well. We pay more attention to what we eat and how we eat. We are more conscious about the time that must be spent on physical exercise. We start tracking our emotional changes and levels of pressure since many of us are becoming more fragile during this difficult period.

There is an increasing demand on setting the right conditions by combining home space, atmosphere and smart technology to care more for body, mind and soul.

#### **NEEDS & NEW BEHAVIORS FROM PEOPLE**

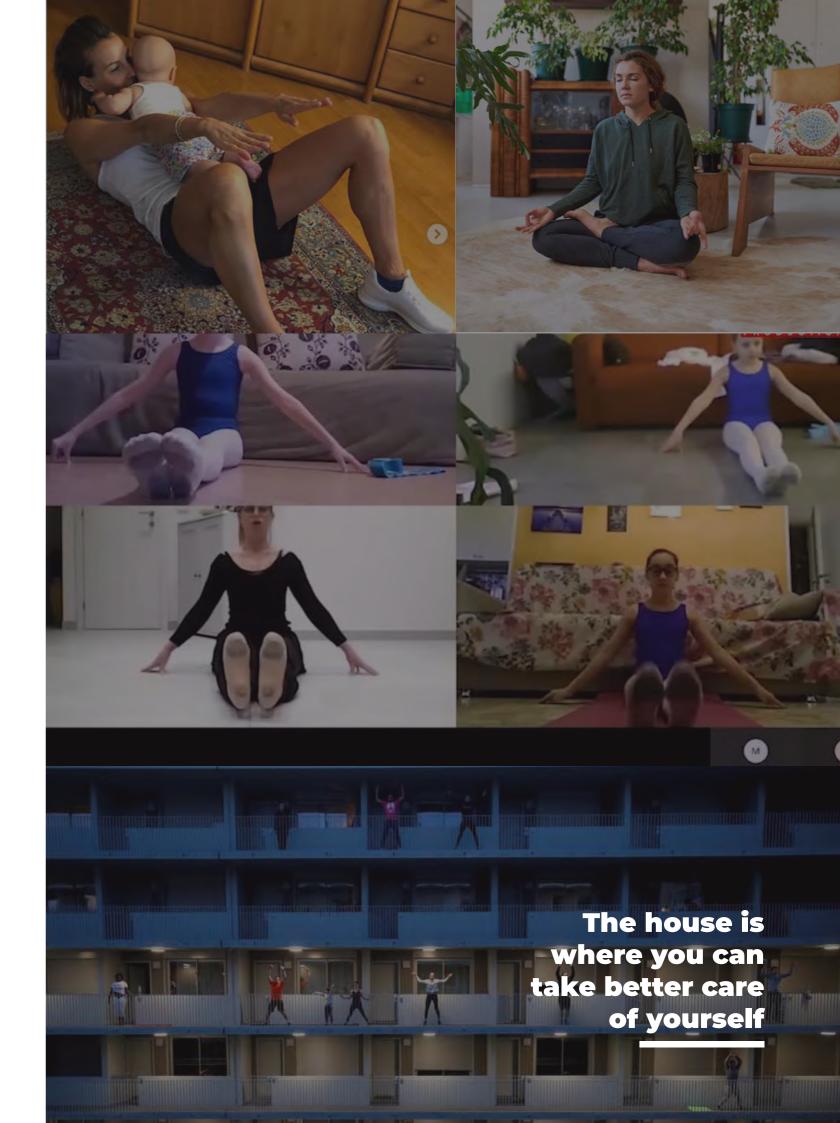
(survey-based data)

**54,3**% of people participating in our survey said they have started to do fitness training at home, while **22,2**% spent time taking care of themselves and of people living with them or pets;

Among all the answers, **35**%\* used online services to set up a healthy diet, and **18.2**%\* used online services for personal training, fitness activities and mindfulness courses. A low but significant **1.3**%\* resorted to psychological support services.

This data underline two types of needs related to:

- Physical wellbeing taking care of the body and physique
- Psychological wellbeing taking care of mind and soul



<sup>\*</sup>This represents the percentage of all the answers of this question (not of all participants in the survey).

#### **SCENARIO 4**

# How might we transform our home into a place where we can fully take care of ourselves and spend time on personal wellbeing?



#### **KEY FEATURES**

- the home environment (lights, sounds, perfumes) can create the "right" atmosphere according to a person's emotional needs and activities at that moment (e.g., it might provide a cocoon-like feeling during deep meditation)
- a smart tutor/assistant mainly driven by technology provides guidance and support during activities and exercises studied to improve physical and mental well-being (e.g., workouts, physical exercise, meditation, spa).
- provide almost the same professional effects and the same level of satisfaction for personal care at home (compared to visiting the professional venue).

#### **DESIGN OPPORTUNITIES**

#### **DELIVERED HOME OFFERINGS**

Similar to what is happening in food sector. Experience design of training sessions and wellness (e.g. your personal spa @home), which might integrate physical (service provider comes to your home to offer you the service, one-to-one in person) and digital (tech-driven and easy-to-do) assistant.

#### **EXPERIENCE PACK**

Organization and companies can design and offer an "experience pack" that includes all the digital and physical tools needed (e.g., smart box @home).

## HOME PHENOMENA FOR MENTAL HEALTH

Smart home system integrated in space, monitoring user behaviours and mood, proposing the right environmental conditions to support fragile situations and allow the external professional to receive information about personal conditions and to intervene in case of a necessity.

# Impacted Industries



FOOD



**ENTERTAINMENT** 



**FURNITURE** 



SMART HOME & DOMESTIC APPLIANCES



HOME INFRASTRUCTURE

#### **INSPIRING INITIATIVE**

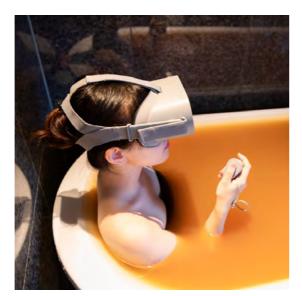


FORM / Fuse Project
Mirror and workout tools with digital trainer
#digitaltraining

From home training sessions organized by sports Brands for their community to VR experience of "like in a spa bathing" offered by a Japanese resort for psychological support, with suggestions from widely known social networks to their followers, and a gift box with dermal cosmetics, users have been offered various opportunities to take care of their well-being at home during the lockdown period. Stress-relieving activities that have been an opportunity for brands to maintain and strengthen the relationship with clients by standing by them in a critical situation.



ADIDAS / Hometeam
Trainer from Adidas posting video with training sessions from their home #trainingathome



ARIMA ONSEN Spa VR experience
A Japanese resort provides a VR bathing
experience
#careofyourbody #VR #spa

# Who is talking about this trend

"Homes have become the new gyms and physical activity sanctuaries in the last couple of months. For some, exercising means staying fit; for others, it's a way of keeping active and busy in order to fight boredom, laziness, and even anxiety"

"With social distancing and self-isolation, dealing with emotional and behavioural issues has become even more challenging and intense. External support for such fragile moments is and will continue to be needed even when we go back to normality."

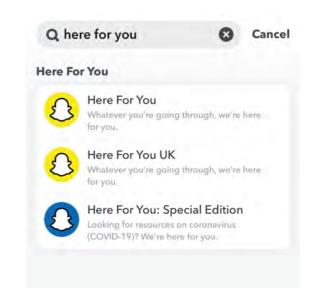
Untangling the Future, NextAtlas April 16, 2020

# Digitalization & Technology

More technology-driven and user-friendly personal devices for wellness will be part of the smart home system.

Smart/digital assistant at home will offer you professional experience in taking care of yourself.

Dgital assistants and technology that create immersive experiences will pick up on emotional and conversational cues, and adapt their outputs to elevate special moments and moods.



# SNAPCHAT / Here For You Based on the user research and posts, suggestions and supports are provided to cheer up or calm down #phycological support #AI



MARIGOLD & GRAY / Immunity Boost Gift box to encourage self-care during quarantine #careofyourbody

# KEEP VIRUS OUTSIDE HOME

**ISSUES THEMATIC VISION NEEDS AND USER HINTS (data from survey)** • wash hands as soon as they get home • a set of products to hygiene hands and surfaces DISINFECTING THE ENTRANCE • basket for gloves and masks at the entrance AND PERSON **KEEP VIRUS** • stands for clothes and shoes at the entrance CREATING SPECIFIC **OUTSIDE HOME** leave shoes outside the front door or at the entrance QUARANTINE AREA FOR • sanitize all the products they had with them outside the home OBJECTS AND CLOTHES • delivery services used for security reasons AVOID TO GO OUTSIDE OFTEN

# KEEP VIRUS OUTSIDE HOME

Social distancing and staying at home are the only way to stop the virus from spreading; hence, our home becomes the safe shelter where we feel safe and protected. Whenever we go out, we carefully put on all required protective devices (e.g., face mask and gloves) before we step outside the door, and every time we get back home, we check and immediately sanitize everything as soon as we arrive. In particular, the entrance of our home plays a significant role in supporting all these activities. It is becoming a "filter zone", not a passage anymore but an area where we perform a new ritual of "preparation" before leaving and of "purification" before entering the house. Broadly speaking, we are more alert about the quality of air at home than ever. In another scenario, if someone at home were to get ill or infected by Covid-19, the house should provide a sustainable system to keep two different groups living together safely in parallel.

#### **NEEDS & NEW BEHAVIORS FROM PEOPLE**

(survey-based data)

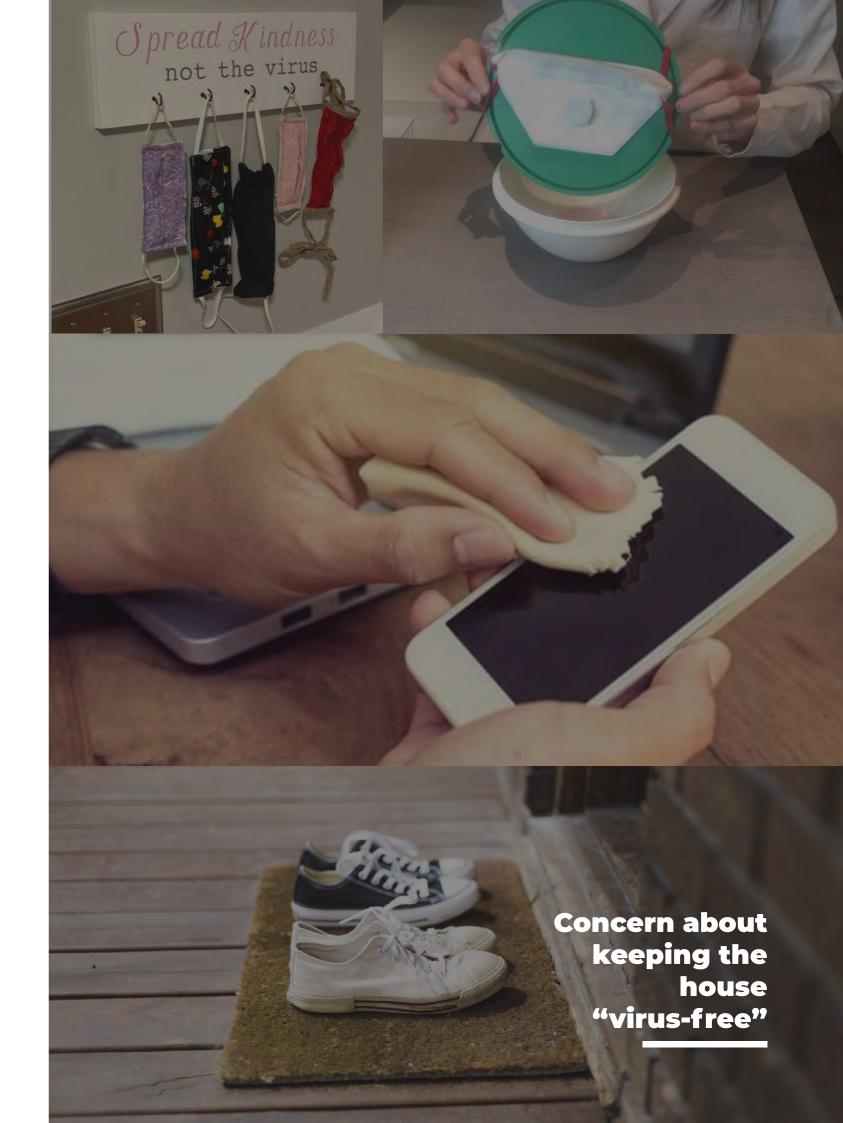
To prevent the virus from entering the house.

**90,2**% of people participating in our survey said they wash their hands as soon as they get home. **51,9**% leave their shoes outside the front door or at the entrance. **35,3**% sanitize all the products they had with them outside the home (mobile phone, grocery products). Objects have appeared at the entrance of the house that were not there before, like a basket for gloves and masks, stands for clothes and shoes, along with a set of products to sanitize hands and surfaces, face masks and gloves.

Moreover, it is interesting to underscore that **delivery services** recorded an increase during the lockdown and mainly for security reasons because they allowed to exclude interaction with other persons.

All this data together underline three main issues related to keeping the house a safe shelter:

- disinfecting the entrance and person
- creating specific quarantine area for objects and clothes
- avoid to go outside often



#### **SCENARIO 5**

## How might we keep our home as a safe "shelter" in an easy and reassuring way? (also when our relatives and friends come to visit us at home)



#### **KEY FEATURES**

- a "protector" that ensures no virus enters my home, both from people and items (e.g., packages).
- a system that helps to easily maintain high hygiene standards at home (checking and cleaning).
- inform/help the person get ready before going out.
- a system that offers the possibility of living in two situations (e.g., one family member has to be isolated).situations (e.g. one family member has to be isolated)

#### **DESIGN OPPORTUNITIES**

#### **NEW LOOK OF THE ENTRANCE** (INSIDE&OUTSIDE)

Redesign how the threshold and entrance should/ could be (new product/furniture or new space structure).

#### **SAFE-CHECK PROTOCOL**

Design a safety protocol that becomes a "welcome ritual" shared with hosts (e.g., take off shoes, wash hands immediately).

#### **ANTI-VIRUS MONITOR**

Design a "scanning" system or service (including product, services, applications) for hygiene and disinfection (e.g., smart monitor of home air quality that includes a parameter for the coronavirus).

#### **SEPARATION SYSTEM @HOME**

A system that provides a quarantine period at home when certain family members are considered suspected cases.

#### **Digitalization & Technology**

Different types of sanitization/ disinfection technologies.

Smart home systems

that could observe and identify the coronavirus, for example, background IoT assistance could create full-circle ecosystems to synchronize delivery and to monitor the sanitization conditions of the house.

#### **Impacted Industries**



**ARCHITECTURE & INTERIOR DESIGN** 



**FURNITURE& HOME DECORATION** 



**SMART DOMESTIC APPLIANCES** 



HOME **INFRASTRUCTURE** 

#### **INSPIRING INITIATIVE**



**HAND / Matteo Zallio** 

a 3D-printed tool that can be used for numerous tasks that would normally require touching a surface directly #hack #3dprinting

The necessity to keep the house a virus-free place allows companies and the creative community to propose new solutions or to adapt existing ones to achieve this goal by focusing their attention on the entrance space of the house.

From ready to use solutions, by exploiting 3D printing technology, to the concept of movable and flexible barriers that create a sanitizing space between outdoors and indoors, to a wardrobe with hygiene features, and goods delivered by robots that avoid contact with strangers, there is a multitude of solutions aimed at transforming not only the space around the entrance but also how we experience the transition from outside to inside our domestic space and the reverse.



ADAPTA / Hands free door knob
3d printed object to "hack" the door knob of
the house and open doors with the elbow
#hack #useyourelbow #3dprinting



IN-SOAP Sizzi Yuruten
A "buffer zone" divided into two areas to
sanitize yourself before entering house
#sanitize #bufferzone

## Who is talking about this trend

"A heightened awareness of how people pick up viruses from the surfaces they touch will lead to more widespread adoption of smart-home technology..." The idea of the great front entrance hall, where you make a transition between the outside world and the world of your apartment, I think has become more important now. It's become a health issue."

Untangling the Future, NextAtlas April 16, 2020 "... perhaps our homes will have to have a sort of "Sanitization hub" A space or an object where every time we go home we will place our phone, wallet, or whatever, where special UV light will identify the urgent need to disinfect."

Mirco Pasqualini, Post Pandemic Design, Medium, April 9 2020



SAMSUNG Air Dresser
Wardrobe to hygienie clothes through jet steam
#hygieneclothes #jetsteam



JD.COM delivery robot
JD.COM, chinese retailer giant, launched a robot for home delivery
#homedelivery #robot

# **OUTDOOR SPACE IS A MUST-TO-HAVE**

**NEEDS AND USER HINTS (data from survey)** 

**ISSUES** 

THEMATIC VISION

- need to escape and relax
- need to be in relationship with nature
- purchase of outdoor furniture
- re-set of balcony and garden layout
- move the workspace closer to the window
- pic-nic and sun-tanning in the balcony
- need of sociality
- · need to be connected with the world



OUTDOOR SPACE IS A MUST-TO-HAVE

## **OUTDOOR SPACE IS A MUST-TO-HAVE**

We have either experienced or witnessed the distress associated with being in an indoor space for an extensive period. The longing to be close to nature was especially mentioned by people living in very small apartments in big cities. The balcony became one of the most appreciated spaces during the quarantine. Windows, balconies, terraces, rooftops and gardens were places where we could perform almost any kind of activity, from building our own garden with vegetables and flowers to creating a social happy hour with people living next door. The outdoor space became a new platform to communicate and connect in the neighbourhood.

We see the importance of balancing outdoor and indoor space for a house, as well as the importance of creating a different layer of privacy.

#### **NEEDS & NEW BEHAVIORS FROM PEOPLE**

(survey-based data)

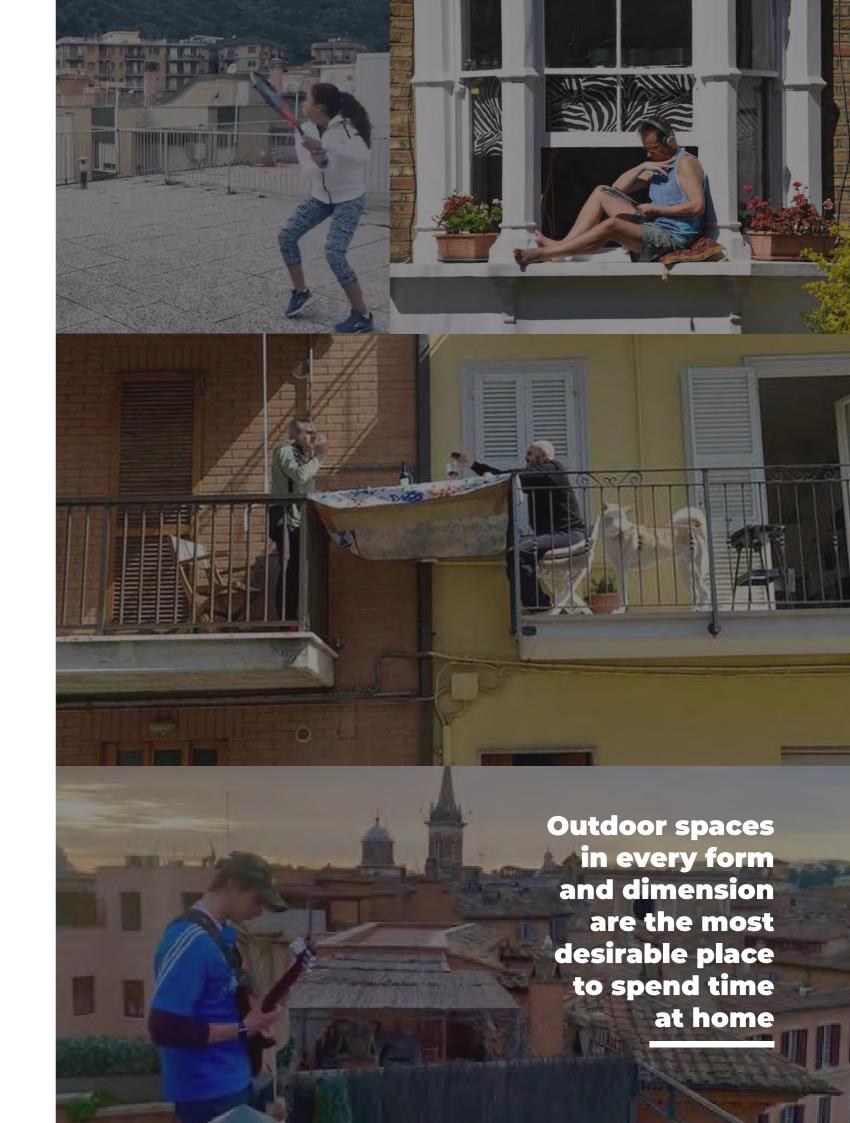
**45%** of people participating in our survey said that outdoor space (balcony, terrace, rooftop, garden) is the area they enjoyed the most during the lockdown period.

**38.5**% said they appreciate outdoor spaces as a way to escape and relax, even if leaving home is not allowed. It is also the space to socialize and stay connected with the world.

This is confirmed by the fact that most of them (22%\*) bought outdoor furniture, and 12%\* purchased plants, vases and other material for gardens.

The data collected, therefore, enhanced two main issues related to outdoor space:

- Being in relationship with nature
- Being in relationship with the world



<sup>\*</sup>This represents the percentage of all the answers of this question (not of all participants in the survey).

#### **SCENARIO 6**

# How might we enhance the possibilities to benefit more "outdoor" experiences with very limited outdoor spaces?



#### **KEY FEATURES**

- establish continuity between indoor and outdoor spaces
- make people feel connected with the outside world, both with other people and with nature
- the outdoor environment is becoming the new living room, and we can exploit it best for various activities (e.g., workouts, study, play games).
- be able to switch between privacy and sociality according to the disparate needs of at different moments.

#### **DESIGN OPPORTUNITIES**

#### **OUTDOOR ENTERS THE HOME**

Conveys outdoor conditions inside the home (e.g., increase functional space around the window, design the space with an internal garden ...)

## PRIVACY & SOCIALITY IN MY BALCONY

System to provide various layers of privacy: from private to public.

#### **OUTDOOR STYLIST**

Consultancy service guiding people to create their own outdoor space (part of interior design activities).

#### **SOCIAL HOUSING 2.0**

System able to ensure social interaction while maintaining physical distance (new layout and structure for house and residential buildings, which have more shared public spaces and less personal indoor spaces).

## Digitalization & Technology

Intelligent
security systems
could guarantee
personalized outdoor
space protection and
offer uninhibited
safety. This will allow
people to safely spend
more time in outdoor
spaces with the
desired privacy.

#### Impacted Industries



REAL ESTATE

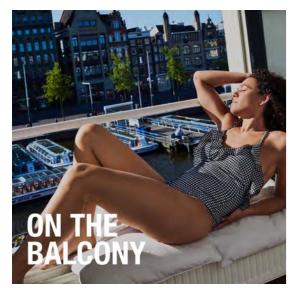


FURNITURE& HOME DECORATION

#### **INSPIRING INITIATIVE**



Being forced to stay at home has increased the need to make the best use of spaces, even the smallest ones, in order to have a connection with the outside world and nature. Hence, underwear brands, such as Oysho, exploit this need by promoting sunbathing from windows, while IKEA promotes tips to transform even the smallest balcony into a perfect private outdoor space. And for those living in a place without access to outdoor space, the creative design duo Sovrappensiero has developed a QR code that randomly shows images of beautiful natural settings. However, creativity comes also from the bottom, when people personally make homemade sticks for a toast with neighbours, and overcome physical distance with ingenious creativity.



OYSHO On the balcony
Campaing to promote suntanning from the window
#promotion #windowasabalcony



IKEA Ripartiamo da casa Suggestions to transform small balconies in cosy and welcome outdoor space #smallbalcony #smallchanges

## Who is talking about this trend

"The terraces and roofs will be involved to create continuity with the adjacent areas, creating indooroutdoor living areas, bedrooms with private patios, etc.", says Javier San Juan, founder of Lado Blanco Architects

"How Will Coronavirus Change Our Homes?"\_Houzz, April 20 2020 "After spending so much time indoors, having access to fresh air and nature at home is likely to become a priority. ... to provide a closer connection to nature"

"How the Virus May Change Your Next Home"\_The New York Times, May 12, 2020



SOMEWHERE SovrappensieroA
A draw that act like a QR code, showing
the image of an exterior place, that change
randomly. For those that haven't a domestic
outdoor space
#virtualoutdoor



**STICK FOR APERITIVO**An home-made hack for safely cheers with neighbors
#safelycheers #homemade

# COOPERATIVISM FROM HOME

NEEDS AND USER HINTS (data from survey)

THEMATIC VISION

- help family member/neighbour/friend to purchase food, medicines and other essential goods
- use of a basket to pass the food from balconies
- purchased food through several local shops
- Group purchase of km0 products



COOPERATIVISM FROM HOME

## COOPERATIVISM FROM HOME

Home is a "touchpoint" in fostering an active network in the neighbourhood. More than ever, we have realized the power of generosity. We have witnessed how weak people could become due to this unexpected virus but, at the same time, we have seen how powerful the community could become when we support each other in very simple ways.

Thinking and approaching problems with a collective perspective, instead of a personal and individual one, could change how we behave and act.

This crisis has highlighted the need to form and recognize a new definition of community tie/connection/network. The future community will bridge homes both physically and digitally, and provide the options and space required to support each other, but with a guaranteed distance.

#### **NEEDS & NEW BEHAVIORS FROM PEOPLE**

(survey-based data)

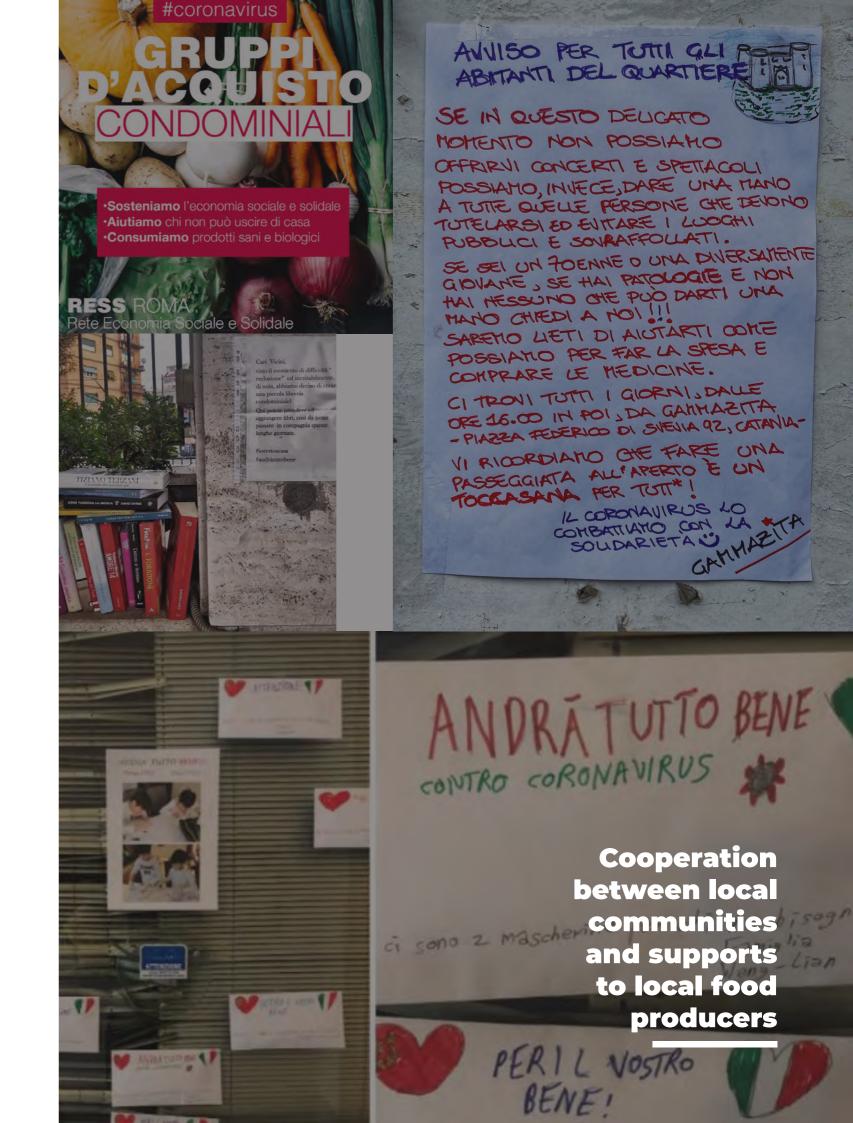
**32%** of people participating in our survey said that they purchased food through several shops (baker, greengrocer, butcher) in the neighbourhood to support local businesses.

**8.6%** of people had a family member/neighbour/friend help them do it.

Some of them even used a basket to pass food from one terrace to another in the same building to support each other when needed.

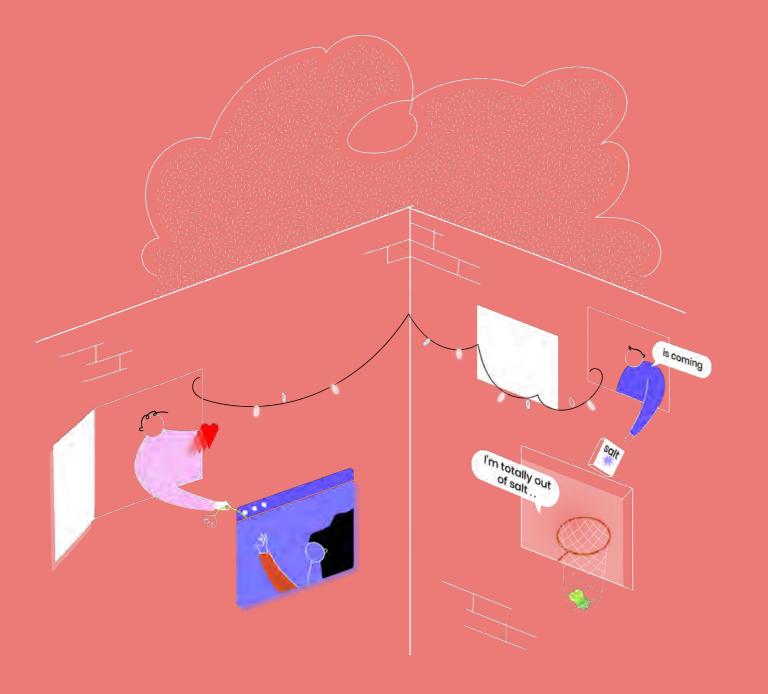
Data underscoring needs that have been observed, also through social networks and newspapers, concern a new cooperative trend, precisely:

- Being helpful for your neighbour
- Support local producers



#### **SCENARIO 7**

# How Might We facilitate a stronger and supportive relationship in the neighbourhood even from home?



#### **KEY FEATURES**

- information and communication network in the neighbourhood.
- integrate physical and digital relationships in the neighbourhood
- give and receive different forms of mutual support (e.g., common areas for delivery/pick up of products).

#### **DESIGN OPPORTUNITIES**

## COMMUNITY-CENTERED INFRASTRUCTURE

Create a community-based social & services infrastructure in the neighbourhood to expand local support and exchange.

#### **SOCIAL HOUSING 2.0**

New proposals on residential buildings and houses to physically link families in the neighbourhood (e.g., design a community-centred "safe space" where things and activities are shared and collaboratively done).

## Who is talking about this trend

"Design for social good. The Internet then connected and brought us all together, paving the way for aspects such as "Collectivism" and "System Consciousness," embraced by the new generations, bringing our society from the concept of "Age of I" to "Age of We."

"Post Pandemic Design", Mirco Pasqualini on Medium April 9 2020

## Digitalization & Technology

Technology will help to create more open and shared communities that connect with neighbours through social channels in order to share information and facilitate spontaneous interaction.

## Impacted Industries



**REAL ESTATE** 



**FURNITURE** 



ARCHITECTURE& INTERIOR DESIGN



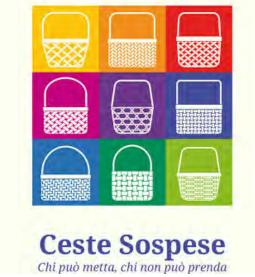
NON-PROFIT&
PUBLIC SECTOR

#### **INSPIRING INITIATIVE**



During the lockdown various spontaneous initiatives developed between neighbours to help each other in purchasing food, medicines or collecting face masks and gloves for those in need. "Ceste Sospese/Hanging Baskets" is a spontaneous movement born in the leading Italian cities to help those in need by dropping a basket, from private balconies, filled with food, medicines and other essentials.

Some food store brands perceived this need and became a contact point for volunteers and people in need of help by supporting online platforms and a dedicated application. In the most difficult moment of the lockdown, small producers and local shops were the ones that, due to flexibility and physical proximity, most easily managed to meet people's needs by using social media to make themselves known and keep in touch with old and new customers by organizing an efficient delivery network. Even Facebook has noticed this renewed attention towards local producers and has, therefore, recently added a feature that allows each person with a profile to report their trusted OKM shop.



#### **CESTE SOSPESE**

Spontaneous movement of help between neighbors, who drop from windows and balconies baskets with food and objects of comfort, available to those in need #forthoseinneed #cooperation



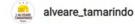
ESSELUNGA Amici Vicini
Service by Esselunga putting in contact
neighbours to purchase food for the ones
that can't go out of the house
#cooperation #platform

## Who is talking about this trend

"Peer-to-peer social commerce will continue to rise with "The Settlers" (a customer segment), who are focused on supporting community members and driving the new circular economy. By opting to purchase directly from their peers, Settlers can see the direct impact that their spending has on their community."

"Hyper Socialized Commerce Trend", Future Consumer Report, WGSN May 2020 "Talking about "social housing" at a time when we are forced to eliminate all forms of sociality due to a pandemic, may seem like a paradox. Yet social housing itself proves to be a housing solution capable of responding better to the profound upheavals that the situation imposes. The need to work from home, the sense of loneliness due to isolation, the needs of fragile people."

"Social Housing at Covid time", Fondazione Cariplo, March 23, 2020





SMALL PRODUCERS PROMOTE THEMSELF AND ENSURE THE DELIVERY OF FOOD Small producers promoted themself via social network, establishing a direct relationship with their community of clients #smalproducers



#### Daniela, condividi la tua piccola impresa preferita

Usa l'hashtag #CompraKm0 e parla alle persone della piccola impresa che ti piace. Puoi condividere cosa rende questa attività speciale per te e come aiutarla a restare aperta.

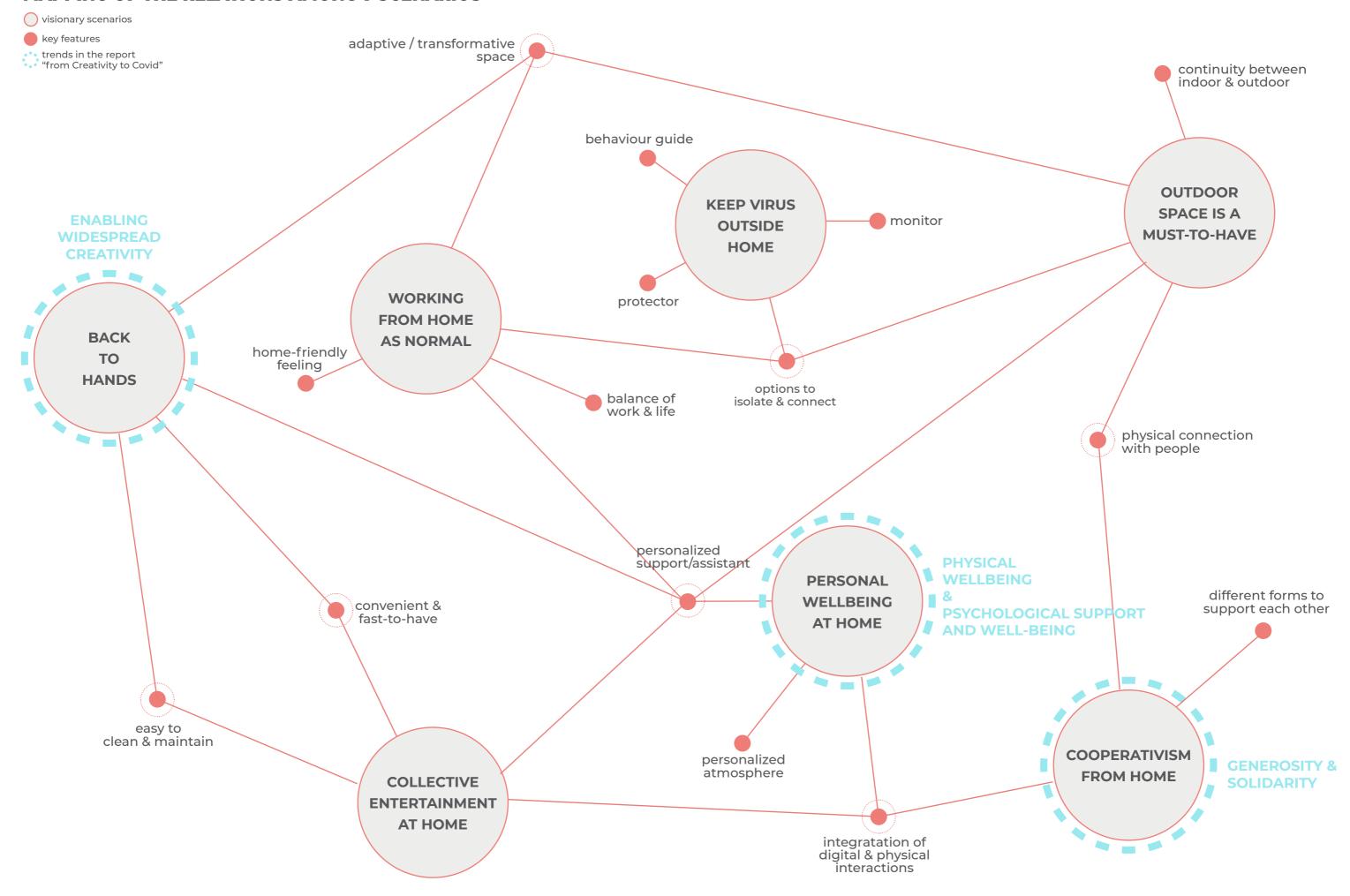
20.249 persone hanno condiviso una piccola impresa

#### FACEBOOK CompraKm0

New function in FB to promote your favourite small producer and Km0 purchasing #km0 #facebook

## SUMMARY MAPPING

#### **MAPPING OF THE RELATIONS AMONG 7 SCENARIOS**





98 \_\_\_\_\_ conclusions \_\_\_\_\_ 99

# Trying to define the New Normal

From politicians, economic experts, environment "guardians" to the public, during the lockdown, everyone tried to imagine how the pandemic could reshape the world we used to know before.

The various opinion arose, from the most optimistic until the worst one, foreseeing radical economical and political changes, and therefore in human habits.

The reality is that, even if the situation is still under the definition, what we can see by now is that instead of shaping a new dystopic world, the Covid-19 has accelerated some changes that were already underway: among others, the spread of technology and digitalization in various sphere of our life, the need of a better work-life balance, the diffusion of smart working, wellbeing and care of our mind and body, environmental issues and therefore a need of a reconnection with nature, the rise of a new consciousness of social disparity and the subsequent proliferation of projects for social good. An acceleration that offers new possibilities of innovation to who (companies, organizations, government, individuals) are able and willing to assume an active role in the definition of this "new normal" having the common good in mind.

"Of course we will live in a new form of normality. However, I don't think the impact of this pandemic will create a change, rather an acceleration to a change that was already underway."

Mirco Pasqualini, Post Pandemic Design, Medium, April 9 2020

# WHAT'S NEXT: future steps

#### **Design Brief generation for companies**

Workshop with students of specialized Master on Furniture Design of POLI.design in partnership with an Italian furniture company. The workshop aims at defining detailed design brief for the design of a post-COVID furniture collection. During this workshop, all the 7 visionary scenarios will be transformed into create and practical design briefs for the company.

#### **Expert interview**

A selection of experts from various fields will be invited to participate in interpreting the scenarios based on their backgrounds and expertise. They will provide their opinions, feedback and future-forwards insights, which will be future developed to better define the details of selected scenarios.

#### New design proposals

The research plans to support different design professionals and companies to make use of these 7 scenarios of future home to eventually develop new product, services and systems.

100\_\_\_\_\_\_ reference \_\_\_\_\_\_\_101

#### REFERENCE

#### **ARTICLES**

- Domus Web, How we inhabited in quarantine: a journal, March 16- May 8, 2020 https://www.domusweb.it/en/news/2020/03/16/ living-in-quarantine-the-journal.html
- Fondazione Cariplo, Social Housing at Covid time, March 23, 2020
   https://www.fondazionecariplo.it/it/storie/servizi/l-housing-sociale-al-tempo-del-coronavirus.html
- Mirco Pasqualini, Post Pandemic Design, Medium, April 9 2020
   https://medium.com/sharing-by-mirco-pasqualini/a-post-pandemic-design-5a9b52603ae
- Noémie Kempf, A growing number of people have given in to the DIY trend in confined times, Paylead, May 26, 2020
- Rafael F. Bermejo, In che Modo il Coronavirus
   Cambierà le Nostre Case?, Houzz, April 20, 2020
   https://www.houzz.it/magazine/in-che-modo-il coronavirus-cambiera-le-nostre-case-stsetivw vs~134257129?utm\_source=Houzz&utm\_
   campaign=u13761&utm\_medium=email&utm\_
   content=gallery2\_2&newsletterId=13761
- Reuters, Quarantine culture from rooftops, balconies and windows, April 6, 2020 https://lta.reuters.com/fotos/articulo/quarantineculture-from-rooftops-balconi-idUSRTS373GI
- Tim McKeough, How the virus may change your next home, The New York Times, May 12, 2020 https://www.nytimes.com/2020/05/12/realestate/ how-the-virus-may-change-your-next-home.

html?emc=confirmation\_ah&regi\_id=29653822

 Zlati Meyer, Here's an ever-growing list of companies that will let people work from home forever, Fast Company, May 22, 2020 https://www.fastcompany.com/90508784/heres-anever-growing-list-of-companies-that-will-let-peoplework-from-home-forever?fbclid=lwAR2rxHILnvAgG QLK-EQUNenmxS4-0zQPieNg9kqG7uLLaVLrpBap-Pub1FBI

#### TREND REPORTS AND RESEARCH

- Andrea Bell, 2022 Future Consumer, WGSN Insight https://futureconsumer2022.com/
- McKinsey&Company, Introducing the new possible, May 2020
   https://www.mckinsey.com/about-us/covid-response-center/conversations/the-new-possible/our-approach
- NextAtlas, Untangling the future, April 16, 2020
- https://www.nextatlas.com/trendreports/detail/
   Adjusting-to-being-alone
- PSFK, Home Debrief\_Make the connected home more human, 2017
- https://www.psfk.com/report/home-debrief

#### **CASE STUDIES**

 Covid Innovation https://www.covidinnovations.com/

#### Home working

 Work From Home Jammies https://www.kickstarter.com/projects/197719879/ 102\_\_\_\_\_\_ reference \_\_\_\_\_\_\_103

wfh-jammies

• IKEA / Ripartiamo da casa

https://www.ikea.com/it/it/campaigns/ripartiamo-da-casa-oggi-piu-che-mai-pub3865b13f

- Stykka / #StayTheFuckHome Desk https://www.stykka.com/products/ staythefhomedesk
- Coors Light / Make your clone and sneak away https://www.covidinnovations.com/home/19052020/ coors-light-introduces-clone-machine-tool-to-helppeople-sneak-out-of-video-meetings

#### Back to hands

- Bottura / Kitchen Quarantine
   https://www.instagram.com/massimobottura/?hl=it
- Leroy Merlin / What to do at home https://www.instagram.com/leroymerlinita/
- IKEA / Meatballs at home https://twitter.com/IKEAUK/ status/1252269467515617280

#### **Collective Entertainment at Home**

- AIRBNB Online Experiences
   https://www.airbnb.it/s/experiences/online
- NETFLIX / Party Extension https://www.netflixparty.com/
- CLUB QUARANTANE
   https://clubquarantaene.stream/

#### VIRTUAL MARIACHI

https://www.facebook.com/pg/Virtual-Mariachi-106795961037664/about/?ref=page\_internal

 IKEA / Ripartiamo da casa https://www.ikea.com/it/it/campaigns/ripartiamoda-casa-oggi-piu-che-mai-pub3865b13f

#### Personal wellbeing

- Arima Onsen / Spa VR experience https://www.theverge.com/2020/4/23/21232323/ japanese-hot-spring-resorts-vr-onsen-arimayoutube
- Snapchat / Here For You https://www.snap.com/en-US/news/post/ introducing-here-for-you
- Adidas / Hometeam
   https://www.facebook.com/groups/
   adidasrunnersMilano/
- Fuse Project / Form https://fuseproject.com/work/forme-life
- MARIGOLD & GRAY / Immunity Boost gift box https://marigoldgrey.com/products/quarantine-giftfor-employees

#### **Keep virus outside**

- SAMSUNG Air Dresser
   https://www.samsung.com/it/washing-machines/airdresser-df60r8600cg/
- ADAPTA Hands free door knob https://www.dezeen.com/2020/04/27/handle-hackshands-free-door-opening/

104\_\_\_\_\_\_ reference

#### • IN-SOAP Sizzi Yuruten

https://www.domusweb.it/it/notizie/2020/03/16/come-abitiamo-in-quarantena-un-diario-dei-giornidel-coronavirus.html

• JD.COM delivery robot

https://jdcorporateblog.com/jds-robot-delivers-first-order-in-wuhan-in-coronavirus-aid-support/

#### Must-have outdoor spaces

- OISHO On the balcony https://www.instagram.com/p/CASIV-6HLSw/
- SOMEWHERE Sovrappensiero
   https://www.sovrappensiero.com/somewhere
- IKEA / Ripartiamo da casa https://www.ikea.com/it/it/campaigns/ripartiamoda-casa-oggi-piu-che-mai-pub3865b13f

#### The rise of cooperativism

- ESSELUNGA Amici Vicini https://amicivicini.it/
- CESTE SOSPESE

https://www.google.com/maps/d/u/0/ viewer?mid=1Fx1k3-JPF9qmEagflKqoFrnI6Na\_1XEt& hl=it&ll=45.46782214799404%2C9.192536377875502 &z=13

• FACEBOOK compraKm0

https://www.wired.it/internet/socialnetwork/2020/05/11/facebook-instagram-buoniregalo-food-delivery/?refresh\_ce=

## **APPENDIX**

108\_\_\_\_\_\_ appendix \_\_\_\_\_\_\_109

#### **SURVEY**

#### **HOME BRIDGES THE WORLD** (questions)

#### **BASIC INFORMATION**

- 1. Name (o nickname) \*
- 2. Age\*
- 3. Gender \*
- 4. Occupation \*
- 5. In which country are you now? \*
- 6. Where are you living during this quarantine? \*
- 7. With whom \*

#### LIFE IN QUARANTINE

- 8. How do you organize your daily routine? \*
- 9. What do you miss most? choose a situation \*
- 10. Have you started to do some activity that you previously were not doing or rarely did? (select all that apply) \*
- 11. Why weren't you doing it before (or rarely)? \*

#### THE GEOGRAPHY OF DOMESTIC SPACES

- 12. Where in your home are you spending most of your time in a day? \*
- 13. Why are you spending more time at that place? \*
- 14. Where in your home are you enjoying most at this period? \*
- 15. Why are you enjoying more in that place? \*
- 16. Where in your home is reserved as the place for taking care of yourself? \*
- 17. In this period, did you buy a new furniture for your home? If so, what is it? \*
- 18. In this period, what is the biggest difficulty you have encountered in managing space in your home?\*
- 19. Are you a worker or a student who is experiencing smart working or distance learning?

#### **WORK AND STUDY**

- 20. Where are you doing smart working/distance learning? \*
- 21. How long do you work/study each day in this period? \*
- 22. How do you work/study (with which device)? (select all that apply) \*
- 23. Which software/platforms are you using for remote work/study? (select all that apply) \*
- 24. What is the most difficult aspect of smart working/distance learning that you are experiencing? \*
- 25. What would you like to have to make it better? (select all that apply) \*
- 26. What will you continue to do/use even in the future for your work/study? (select all that apply)  $^{\ast}$

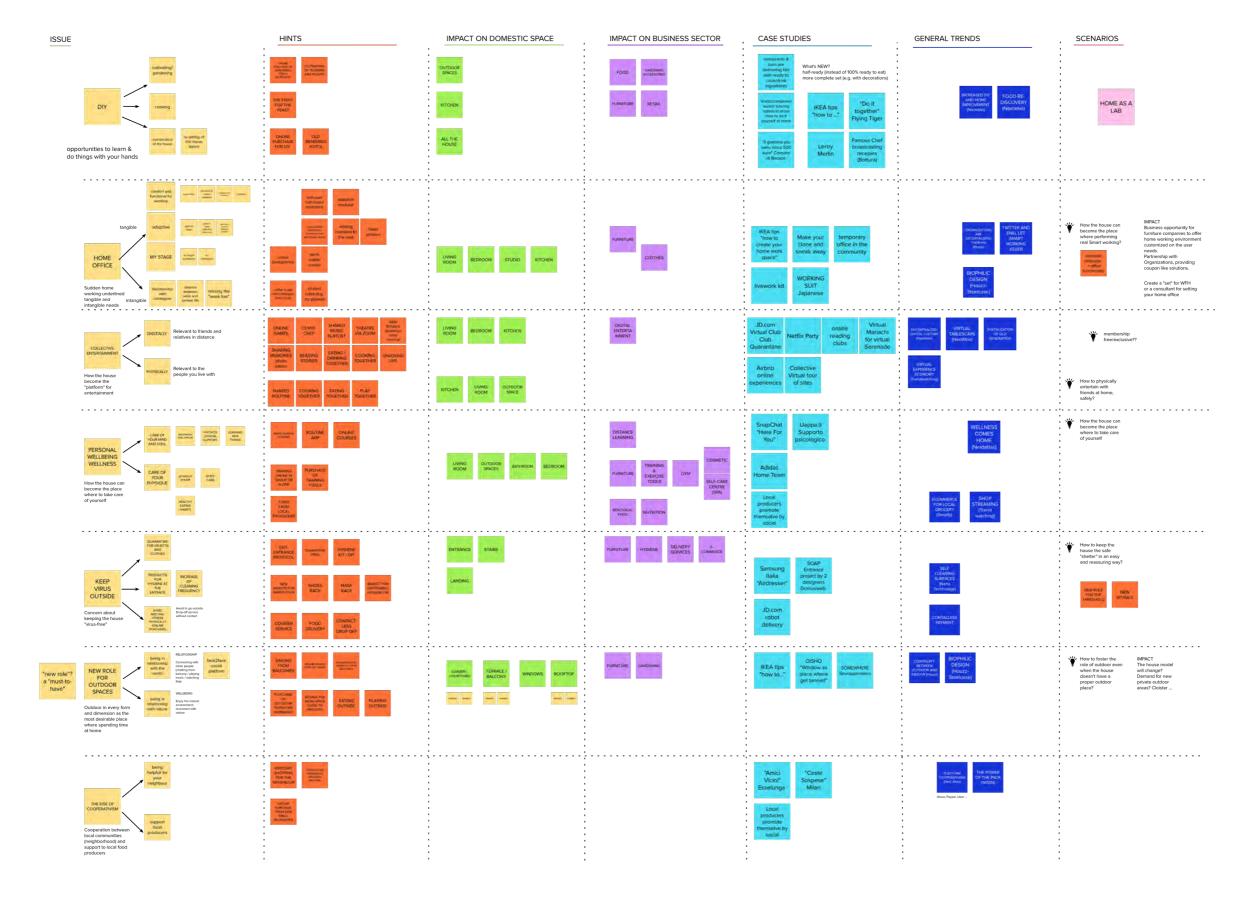
#### **NECESSARY ACTIVITIES**

- 27. Which services are becoming much more important to you in this period? (select all that apply) \*
- 28. Why do you appreciate these services? (select all that apply) \*
- 29. How often do you clean your house in this period? \*
- 30. How do you make sure that you keep the virus "out of the house"? (select all that apply)\*
- 31. What objects appeared at the entrance of the house that you didn't have before? and which are useful to combat the presence of virus? \*
- 32. How often do you do grocery shopping in this period? \*
- 33. Basically, how do you do grocery shopping \*
- 34. Have you used services offered by companies, brands and/or influencers you are following? Which? (select all that apply) \*
- 35. How has your lunch/dinner ritual changed? (select all that apply) \*

#### FREE TIME

- 36. We are all spending a lot of time on video calls with friends and family, but we would like to know what is the other main activity you do in your spare time? \*
- 37. Where do you do it? In which space at home? (select all that apply) \*
- 38. With whom? \*
- What do you want to have to do it better? (select all that apply) \*
- 40. Beyond messages and calls/video calls, how do you maintain relationships with your 41. friends/family who are not with you physically? (select all that apply) \* How often do you do it? \*
- 42. Have you discovered or invented new activities or rituals to feel close despite the distance? (e.g. we send each other photos of our meals) \*

#### **SCENARIO BUILDING PROCESS**





DIPARTIMENTO DI DESIGN

in collaboration with:





cilab-design@polimi.it www.cilab.polimi.it

Follow us on:











#### HOME BRIDGES THE WORLD

conviction that creativity is an inescapable keyword for the restart that involves and builds together

Francesco Zurlo



