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"IN THIS ELECTRIC AGE WE SEE OURSELVES
BEING TRANSLATED MORE AND MORE INTO
THE FORM OF INFORMATION, MOVING
TOWARD THE TECHNOLOGICAL EXTENSION
OF CONSCIOUSNESS."¹

- Marshall McLuhan

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FOREWORD

How will we live in the future? What technologies, trends, and ideas will shape it? How can we realize a Global Village that is smart, connected, economically prosperous, and socially responsible?

These are a few of the questions that challenged the media Gurus and charrette participants from around the world during the Meet the *Media Guru Special Edition* | *Future Ways of Living event*, which took place in Milan (Italy) to celebrate the 10th anniversary of

Meet the Media Guru at the World Expo 2015.

Produced by Meet the Media Guru (MTMG) and George Brown College's Institute without Boundaries, the event stimulated discourses that encourage sustainable, humane, and intelligent uses of technology that enhance our daily lives.

Both organizations have long been dedicated to building global discussions to realize a better world. The event provided an opportunity to explore how—at this critical juncture in time—we can actively shape the way we live through technology, rather than merely reacting to technological trends.

The charrette process, inspired by the Gurus' visions and ideas, solidified a view of a future on the verge of realizing the Global Village that Marshall McLuhan predicted in the 1960s.² The next decade offers the opportunity to fulfill this Global Village through the redesign of our global systems and through effective collaboration across boundaries, both physical and psychological.

This book demonstrates how our global systems could be redesigned, it showcases the teamwork that took place at the *Meet the Media Guru Special Edition* | *Future Ways of Living event*, and it illustrates how international collaboration allowed the event to create a Global Village itself.

Luigi Ferrara Maria Grazia Mattei

A GLOBAL PARTNERSHIP

The Future Ways of Living event was conceived by Maria Grazia Mattei and Luigi Ferrara. This builds upon a friendship of over 20 years and a number of past collaborations. This partnership has facilitated the exchange of knowledge, culture, design and ideas between Milan and Toronto, as well as other cities and between citizens from around the world.

MARIA GRAZIA MATTEI

Director, Meet the Media Guru & Founder, Mattei Digital Communications

Maria Grazia Mattei is an expert in digital culture and communication. She has a background in art history, journalism and digital communication, and she founded Mattei Digital Communication (MDC) in 1995 and Meet the Media Guru ten years later in 2005. Since 2012, she has served as Vice President of Assintel, the National Association of ICT companies. and is a member of Fondazione Cariplo's Steering Board. She has organized numerous activities dedicated to the deepening and spreading of digital culture both for professionals and a heterogeneous audience in collaboration with Venice Biennale, Digifest (Toronto), Siggraph (USA) and Imagina (France). In 2011 she curated the Italian exhibition "Pixar. 25 years of animation" at PAC (Milan) and Palazzo Te (Mantova).

LUIGI FERRARA

Dean of Arts, Design & Information Technology at George Brown College & Director of the Institute without Boundaries.

Luigi Ferrara is an architect, designer, and innovator in design education. Beginning his career as a practicing architect in the UK and Canada, he transitioned into multidisciplinary design and roles associated with design promotion, culture, and education. He led the Design Exchange's programs and services between 1996 and 2002 and served as president and CEO of the DXNet from 1999 to 2002. Since 2002, he has been Director and then Dean of Arts, Design, and Information Technology at George Brown College. Since 2005, he has also lead the Institute without Boundaries, developing systems thinking approaches for resolving complex problems.









INTRODUCTION

CONTEXT



Meet the Media Guru Special Edition | Future Ways of Living was a landmark, three step project co-created by Meet the Media Guru (MTMG) and the Institute without Boundaries (IwB), which took place from the 10th to the 26th of June at Mediateca Santa Teresa di Milano, during another important event for the city: the World Expo 2015.

Two Guru Days, the Future Ways of Living Charrette and the encounter Toronto meets Milano gave life to the whole project. It was an official event of "Expo in Città," a platform for endorsed related events from May to October 2015 that paralleled the World Expo. The following provides context about the event, its inspiration and intent, and its relevance moving forward.





CONTEXT

In 2015, Meet the Media Guru turned 10 years old and wanted to celebrate this achievement with an explosive Special Edition rich with international guests, ideas, and visions for the next ten years. At the same time, the absence of a Canadian Pavilion at the Expo and the resulting absence from that global dialogue in Milan inspired Luigi Ferrara (Director of the Institute without Boundaries at George Brown College) to reach out to his longstanding collaborator in Milan, Maria Grazia Mattei (Director of Meet the Media Guru), to discuss the possibility of a Milan-Toronto collaboration that would fill that void.

The goal was to create an event that would expand upon the dialogue and narrative raised by the Expo by building upon the existing sistercity partnership between Milan and Toronto involving key players from both cities, including their municipal governments and organizational entities, educational partners, and corporate sponsors.

The Milan Expo 2015 theme of Feeding the Planet, Energy for Life echoes widely held concerns and debates about the future prosperity and sustainability of our human civilization that are being considered around the globe by governments, NGOs, private organizations, and citizens' groups.

These conversations and correlating national perspectives on the topics are a key part of the Expo and are reflected in the pavilions from the 145 participating countries. Together, they create a global dialogue with each country contributing its unique perspective and point of view. When the pavilions are viewed in relation to each other, a narrative emerges around food access, security, and the challenge of accomplishing both that is being exacerbated by factors such as climate change, continued population growth, and dwindling natural resources. The Expo gathering has the potential to act as a call to action for the creative reform of how we operate our societies, as well as

the potential to compel us to consider how we can work together to solve complex global issues. As we live in an increasingly connected world, this mandate for global collaboration is essential to solve the complex issues we face in the 21st century.

This narrative aligns with the vision shared by Meet the Media Guru and the Institute without Boundaries around collaborative design practice for a better world and "cultural contamination" through understanding of the signals that are harbingers of change.

The idea of *Meet the Media Guru Special Edition* | *Future Ways of Living*, was therefore to expand beyond the themes of Food and Energy, to address the topics of Mobility,

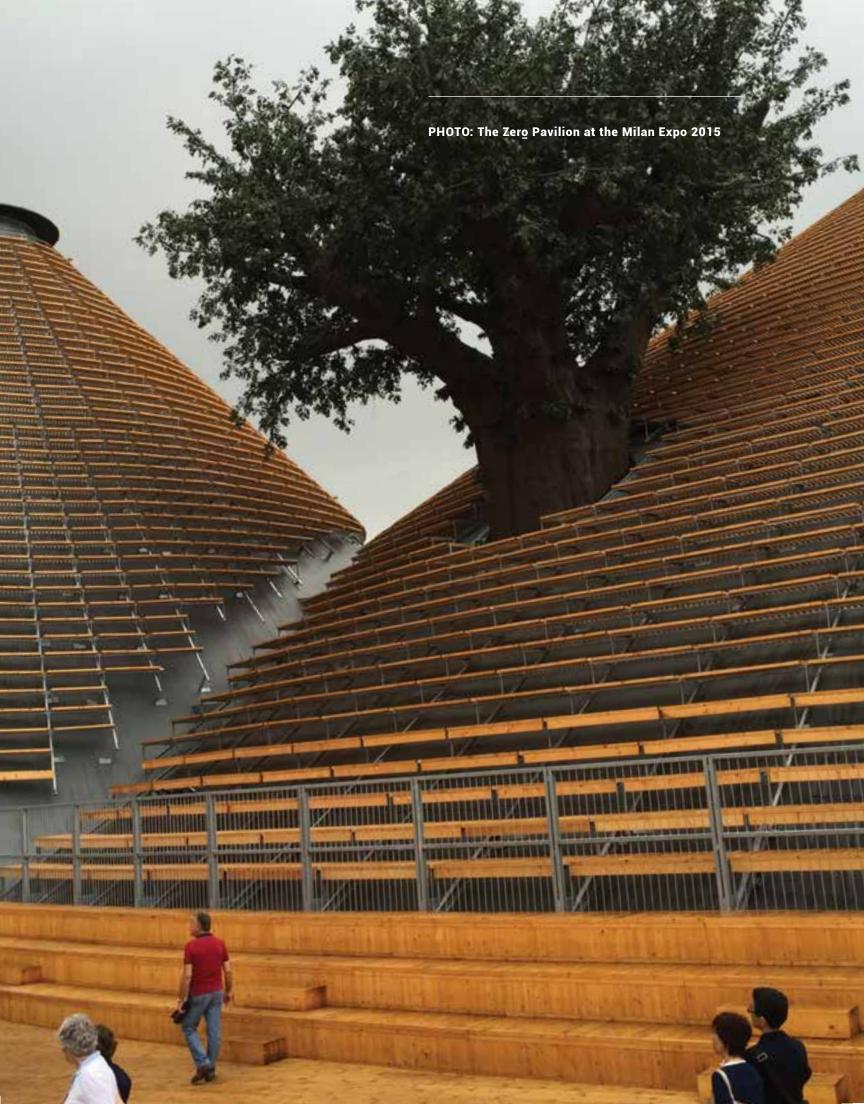
Communication, Energy and Economy,

Health and Wellness, Education,
and Food in order to explore a more holistic perspective about our social systems, how they are organized,

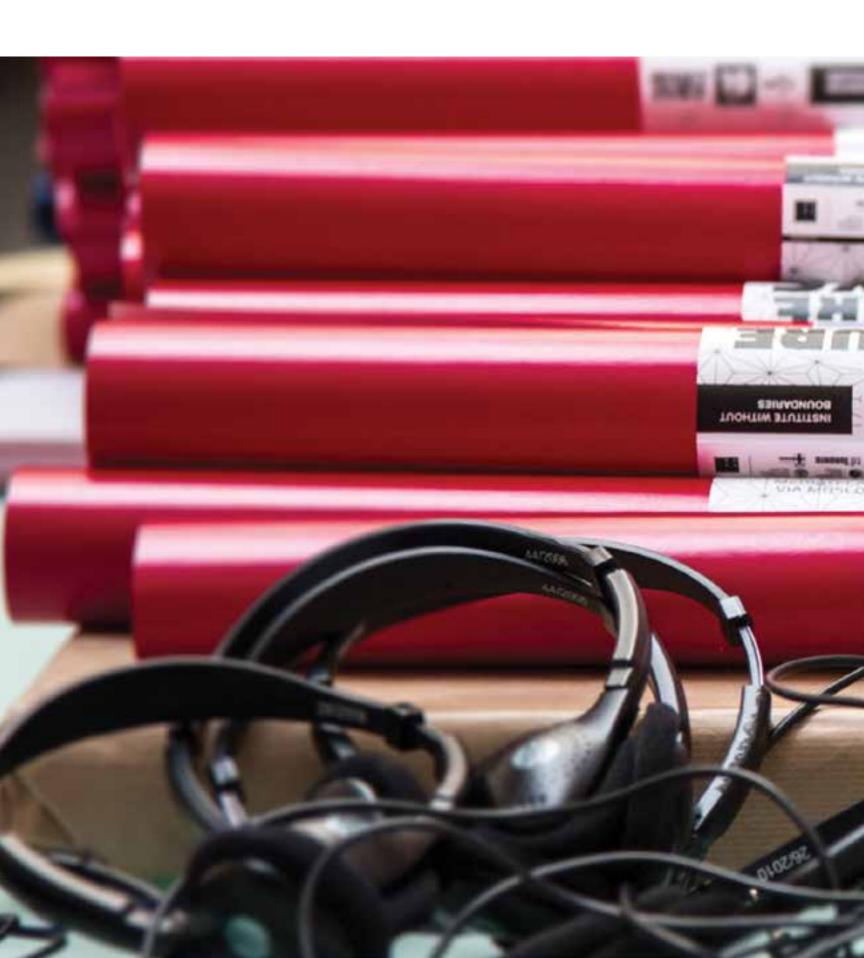
how they might be changed and how we could create a positive vision for our society's future: a future that is being deeply transformed by the rapid impact of new technologies.

The project was also an opportunity to cultivate the values of both organizations by promoting a balanced, sustainable, resilient, intelligent, democratic, responsible, and humane approach. The aim was to design visioning, while providing a platform for innovation, idea generation and multidisciplinary collaboration amongst creative people from around the world, whether they be students, professors, design practitioners, or employees of the various corporate supporters of the project.

This objective was realized by following a three-step path composed of two Guru Days, the Future Ways of Living Charrette, and the encounter Toronto meets Milano.



FUTURE WAYS OF LIVING



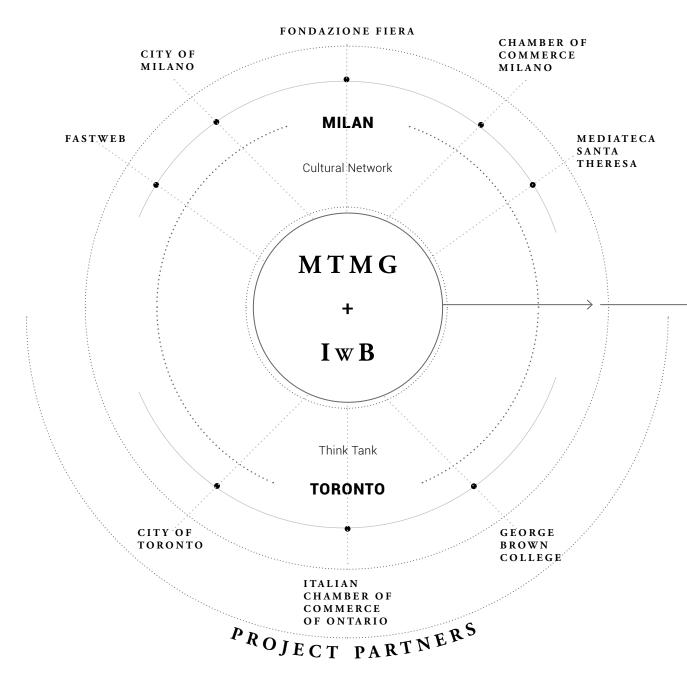
The result was the Future Ways of Living event, which included the Meet the Media Guru Days, the Special Edition Symposium, the Future Ways of Living Charrette, and the Sister City Closing Event between Milan and Toronto.

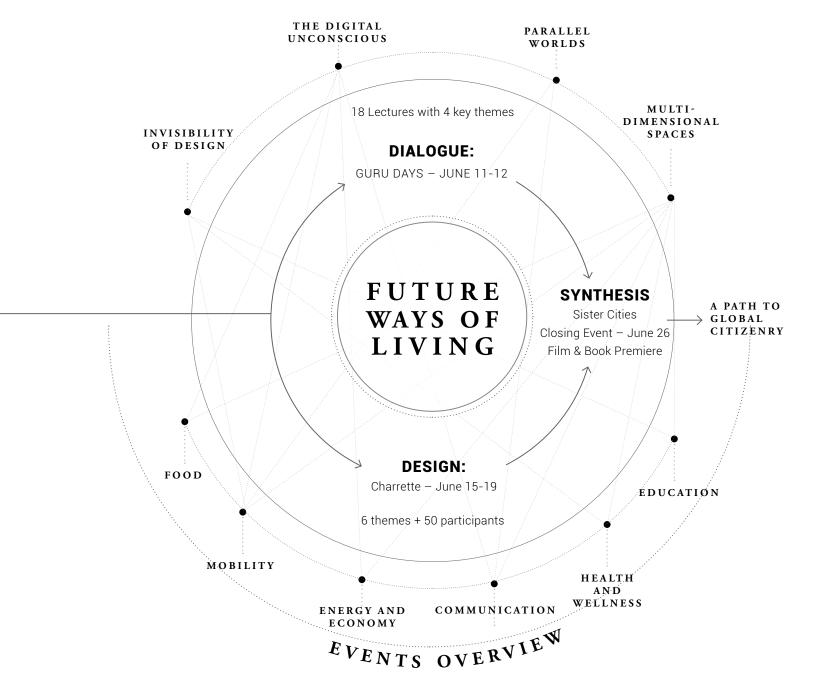


FUTURE WAYS OF LIVING

Future Ways of Living challenged thought leaders, students, professors, design professionals, and corporate stakeholders from around the world to imagine how we want to live over the next ten years and how technology could support and enhance our vision of that future. Academic, corporate, and governmental partners were engaged to encourage a holistic global dialogue that mirrored the values of the World Expo, as seen below.

Future Ways of Living took place in Milan over three weeks in June 2015, and included three key components: the Guru Days Symposium, the Future Ways of Living Charrette, and the Sister Cities Closing Event between Milan and Toronto. The closing event showcased a film trailer for the event documentary as well as the galleys of this book in progress.

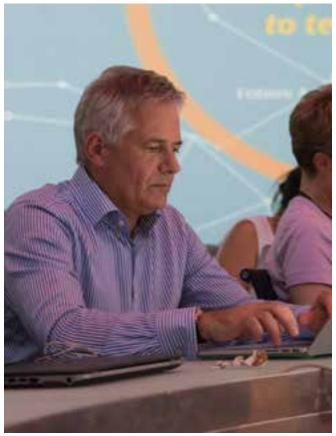














DIALOGUE

GURU DAYS - JUNE 11-12

Kicking off the *Meet the Media Guru Special Edition* | *Future Ways of Living* project, the two Guru Days were intended not only to give a rich overview of the digital panorama, but also to be a gift to the city of Milan and celebrate MTMG's 10th anniversary as an organization.

This symposium leveraged MTMG's expertise and network, providing a platform for 18 international thought leaders to deliver inspirational talks regarding how they envision the future unfolding. This event was held at the Mediateca Santa Teresa of Milan, and broadcast to an international audience with the help of event sponsor FastWeb. During the event, the Gurus painted a picture of the technological transformations that are influencing our cultural landscape, through the

lens of their respective disciplines. They covered a variety of topics from politics to robotics and explored how we should shape our societal systems over the next decade in response to technological advancement.

This acted as a prelude to the charrette process, providing inspiration for the design charrette and informing the final projects that were developed by each charrette team.

www.meetthemediaguru.org

MEET THE MEDIA GURU

MTMG goes beyond the traditional cultural network and speaker series, establishing a culture around digital media that engages a global audience and encourages the dissemination and literacy of digital media beyond the traditional arts, design and communication spheres. This is achieved by providing a platform for thought leaders or Gurus to share ideas and inspire the next generation of thinkers, artists, and designers to one day be thought leaders themselves.







DESIGN

FUTURE WAYS OF LIVING CHARRETTE - JUNE 15-19

The Future Ways of Living Charrette, which followed the Guru Days, was developed with the Institute without Boundaries' unique expertise in creating collaborative design exercises that involve design thinking, strategy, and co-creation.

This intensive design charrette engaged over sixty participants from over twenty countries. The participations, which came from various academic and professional backgrounds, came together to develop, envision, and redesign societal systems in response to the question, How can technologies help us create the way we want to live over the next ten years? Participants were selected with the help of the Cumulus Association and the Politecnico di Milano.

Participants were divided into six teams, each focusing on a specific

theme that offered a different perspective from which to look at the next ten years. The themes included Mobility, Communication, Energy and Economy, Health and Wellness, Education, and Food. Each team was led by IwB staff and faculty, and a variety of IwB methodology tools were utilized to facilitate ideation, iteration, and co-creation throughout the charrette process.

The ideas and content generated during the charrette were captured as visuals, written text, and film. It is this content that makes up the bulk of this publication.

INSTITUTE WITHOUT BOUNDARIES

The IwB was founded on the belief that interdisciplinary design can change the way we approach problems in the modern, globalized world. The IwB launched Massive Change in 2004, which emphasized that through design, it is possible to create a global design discourse that encourages positive change. Since then, the IwB has continued to evolve, establishing a unique approach to design that brings creatives and the public together and breaks down the barriers of overspecialization to solve local, regional, and global issues in a holistic way. This is achieved through systems thinking, collaborative creation, and multidisciplinary design processes that are facilitated by tools and methods developed at the Institute without Boundaries.



SYNTHESIS

SISTER CITIES CLOSING EVENT - JUNE 26

This book and the accompanying documentary film were created by the core staff of the IwB and MTMG. Using the rapid prototyping methods of the IwB, the team combined the content, ideas, and imagery into a narrative for display at the closing Sister City event.

In the week following the charrette, the core charrette team—including members from MTMG and the IwB—extracted, synthesized, and built upon key insights and ideas to communicate the results of the event. This was completed in just five days (June 22-26) and included draft galleys of the publication and a documentary film trailer that were showcased at a closing event on June 26, 2015 at the Mediateca Santa Teresa, our host during the three-week event.

The closing event also celebrated the sister city partnership between Milan and Toronto, which included contributions by Cristina Tajani (Assessore of Culture in the City of Milan), Michael Thompson (Chair of the Economic Development Committee of the City of Toronto), and Sergio Scalpelli (Director of Communication of Fastweb, Official Partner).

Content captured during Future Ways of Living continued to be revised and synthesized after the event, culminating in this publication. This book is intended to continue the dialogue on the role technology will have on our daily lives over the next ten years, inspiring and challenging a global audience to shape our future by conscious acts of design.

It became immediately clear after the completion of the event that this would be the beginning of an ongoing discussion on how we can use technology in more creative and productive ways. There is an opportunity to actively shape the way we want to live, rather than merely reacting to change driven by emerging technology. By designing ways of living and using technology as an instrument rather than a determinant, we believe we can create a more positive future.

SISTER CITY COLLABORATION

In conjunction with the creation of this publication, it was determined that the other output of the *Meet the Media Guru Special Edition* | *Future Ways of Living* event would be a documentary film. While the publication captures the ideas of the Gurus and the projects developed by the teams during the charrette, no printed publication can capture the dynamic and evolving process of a charrette quite the way a film can. Film captures personalities, conflict, dialogue, and activity: in short, it captures the creative process that underpins the creative product.

To achieve this goal, the IwB recruited novice filmmaker Marcello Ferrara and paired him with an experienced cinematographer, Voitek Pendrak. Together, they interviewed the Gurus on the Guru Days and followed the activities of the teams as they developed their projects. The idea was to create the film in a one-week period so that its premiere would coincide with the Toronto-Milan Sister Cities Closing Event on June 26th. The complexity of the activity and the sheer volume of film shot made this task impossible, so a trailer was edited that captured the spirit that will infuse the final film. It combined insights on design and the future from the Gurus with the thoughts and feelings of the participants and the general life of Milan and Toronto. The final film will

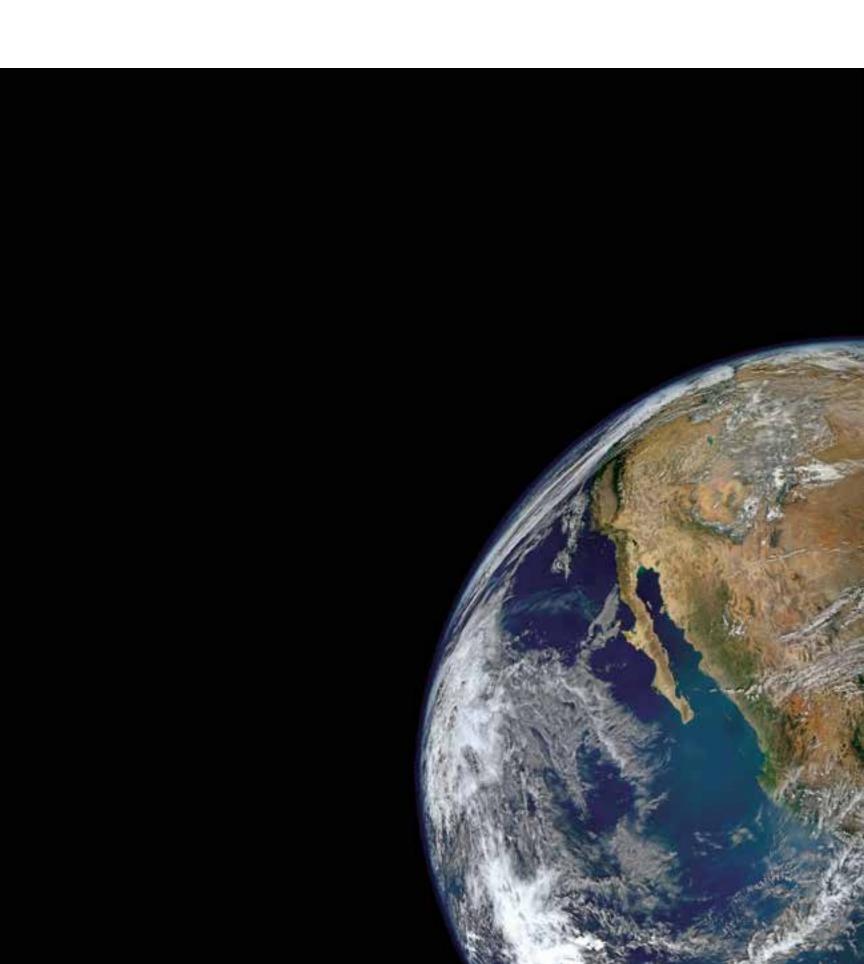
document the efforts of 48 designers from all over the world as they gather in the Mediateca of Milan for 7 days and 7 nights to imagine life in the next 10 years.

The ups and downs of collaborative design, including the insights, debates, and breakthroughs of the process, are unpacked, as is the future of Mobility, Communication, Energy and Economy, Health and Wellness, Education, and Food as the viewer watches the designers grapple with our present systems in an effort to reimagine them.

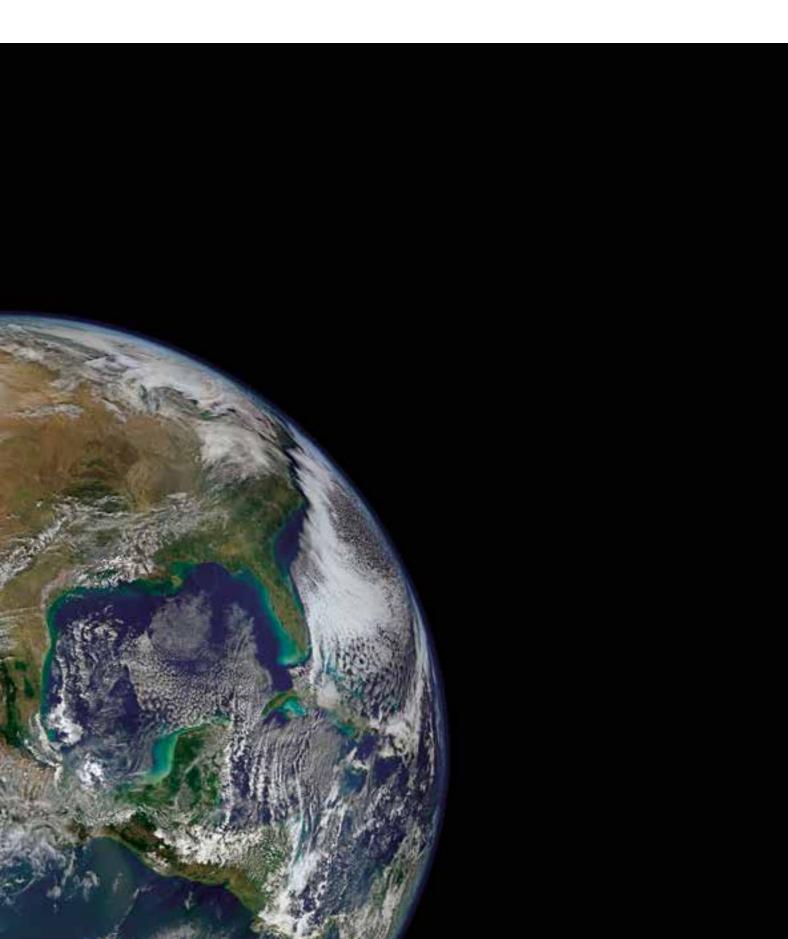
The Future Ways of Living documentary illustrates how design can empower us all to transform our lives through creative action.

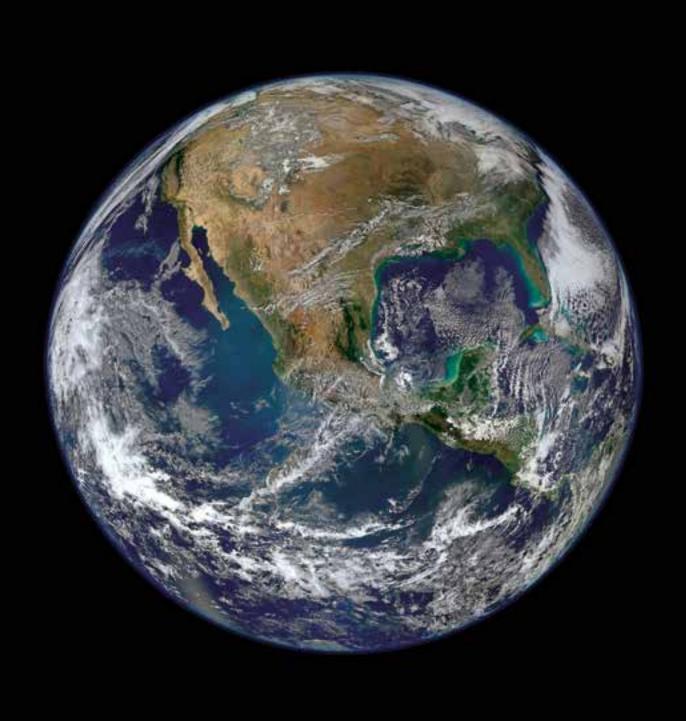


THE GLOBAL VILLAGE



Because the World Expo 2015 in Milan was an event dedicated to international collaboration and creation, it was appropriate that Future Ways of Living took place at this nexus of exchange.





THE GLOBAL VILLAGE

In the early 1960s, after a decade of rapid technological and social changes that followed the end of the Second World War, people became aware of the fragility of the world. The atomic era, which was exacerbated by the ongoing Cold War, posed a constant threat to our planet.

With the viewing of the first photographic images of our planet earth from afar, people began to realize that our planet was potentially at risk of extinction due to the impacts of the accelerating pace of change from industrialization. This understanding of earth's vulnerability crystallized at the 1967 World Expo in Montreal, Canada, where Buckminster Fuller's geodesic dome became an icon of planetary consciousness. That year's Expo theme, "Man and His World," underlined this new awareness.

It had been five years since Marshall McLuhan coined the term "Global Village" in Toronto, a city where the forces of migration had managed to foster a cultural diversity that makes the metropolis "one of the most multicultural cities in the world." Toronto is currently a place where

more than 200 ethnic groups coexist peacefully, a city in the process of becoming a cosmopolis with a global soul.⁴

Toronto is also home to the Institute without Boundaries (IwB), an academic think tank and program within George Brown College, a learning institution founded in the same year that Fuller's geodesic dome was revealed at the World Expo. The purpose of the College was to make education accessible to the diverse citizens of Toronto who were interested in applied learning. GBC and the IwB espouse McLuhan's principles of the City as a Classroom and believe that people learn a great deal from the city that surrounds them.⁵ Moreover, it is their guiding principle that people learn most by doing.

THE GLOBAL VILLAGE

Milan is the host of World Expo 2015. Its global theme—"Feeding the Planet, Energy for Life"—revisits many of the ideas that were pioneered at Expo 67: sustainability, the proper sharing and use of world resources, global equity, and social justice.

These themes were also prominent in Martin Luther King's Nobel Prize winning speech. He called for us to think of our society as a World House where racial, social, religious, territorial and economic divisions were to be overcome by a new way of thinking about how we should live together. In essence he was calling

for a Global Village where all were included and respected.

This vision of equality, empathy, and compassion is as relevant to us today as it was in Expo 67 and was a main theme at the Milan Expo as well as the Meet the Media Guru Special Edition | Future Ways of Living, the two Guru Days, and the Future Ways of Living Charrette. Despite globalization and the exchange of best practices, which help drive collaboration and progress, there remains much social injustice, economic inequity, as well as racial and religious discrimination. Certainly, there is much work to do still.





FUTURE WAYS OF LIVING AS A GLOBAL VILLAGE EXPERIMENT

The Future Ways of Living project shows the potential for connectivity and collaboration. In a short period of time, two organizations brought together two cities, four associations, four institutions, five companies, and sixty creative professionals to work together on a global project that rethinks how we want our societal systems to better serve us.

All the groups came together to generate exciting ideas. Meet the Media Guru ran the Special Edition Symposium, bringing back key guest speakers from past MTMG gatherings and Digifests to talk about the impact of digital technologies over the next ten years, while the IwB organized an interdisciplinary charrette and living lab that combined the efforts of students, faculty, and professionals from over twenty different countries. Together they envisioned the different ways technology might be applied in the near future to transform our lives.

The eighteen Gurus provided inspiration for the charrette teams by sharing knowledge on topics, ranging from hyperreality and the future of synthetic digital spaces to ethics and transparency in the age of big data. Teams then reimagined the changes

that these technologies could bring to our most vital infrastructure and systems: Mobility, Communication, Energy and Economy, Health and Wellness, Education, and Food. The teams first thought about how we want to live and then conceived of different ways technology could make this vision a reality.

The charrette was planned in a matter of a few months; then, in a compressed, five-day burst of creativity, teams created projects that visualized our Future Ways of Living. The product, a documentary film trailer about the charrette process and a book that could be shared as a gift came together almost effortlessly, as things do when you have a small committed and talented group of people willing to take on a challenge.

The projects that came out of this intense process were both comprehensive and complex. On reflection, they revealed that, for better or for worse, the Global Village Marshall McLuhan spoke of years ago is fast becoming a reality. It seems as if we are on the cusp of proposing and potentially realizing a set of globalized systems that will better serve people the world over.

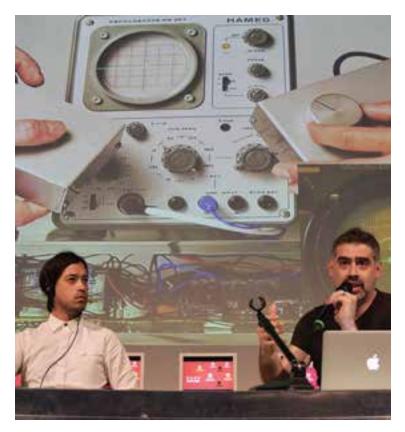
What was also clear in the system visualizations of the projects was that this future will require much effort, which we—as both individuals and a society—may not be ready to face. These imperatives require us to rethink parts of our lives in the years

ahead and to radically change some of our deeply entrenched habits.

Future Ways of Living assembled its own Global Village of people from around the world, crossing traditional boundaries and notions of authoritative knowledge and experience. Our projects made it clear that we will need to delve deeper into our unconscious habits and redefine our relationships with new technologies; they also revealed the increasing potential for greater interconnectivity over the next ten years, which will become the subject of the next chapter of the work of defining our Future Ways of Living.



















GLOBAL GURUS

MEET THE MEDIA GURU:

SPECIAL EDITION GURU DAYS



For over ten years, Meet the Media Guru has hosted thought leaders through a series of evening seminars in Milan at the Mediateca Santa Teresa and in Toronto during George Brown College's annual Digifest. These interactive seminars are streamed around the globe and viewed by an international audience that includes over 20,000 subscribers of the MTMG network. The Guru talks are an encounter with thinkers and their ideas and are a platform for a community interested in what's next for the world.





MEET THE GURUS

SPECIAL EDITION GURU DAYS

After ten years of hosting exciting multidisciplinary and interactive meetings in both Milan and Toronto, Meet the Media Guru wanted to celebrate this milestone with a format it had never used before: opening up a forum for open dialogue and a cross-pollination of ideas.

Typically, the Gurus whom Maria Grazia Mattei invites speak on their own in a seminar event that features their individual ideas. The collaboration with the Institute without Boundaries provided a two-day gathering of the Gurus—a "Special Edition"—where some of the finest minds on the planet could meet in a symposium setting. The MTMG network could access and interact with these speakers, whose discussions would inform and inspire the audience and the Future Ways of Living Charrette participants. For the first time, Gurus also inspired one another by being in each other's company.

These conversations also inspired the gathering by offering a map of the future. Their wide-ranging presentations illuminated Milan and enlightened online participants during this overview of cultural and technological terrains.

The collaboration between Milan and Toronto included working with George Brown College's Institute without Boundaries; the Guru Days became part of this choral initiative of imagining the Future Ways of Living for the cities of Milan and Toronto, and also for cities around the world dealing with similar issues.

But who are the Gurus? The Gurus are typically internationally recognized leaders and experts in particular subjects who are transforming societal and cultural norms, as well as inspiring new possibilities for the future. They are recognized as global leaders with theories, approaches, and projects that have had global reach and influence.

Hearing them speak on their own is fascinating, but experiencing them as a group, covering topics as diverse as citizenship, finance, design, architecture, immersive space, augmented reality, biometrics, art, democracy, law, health, and robotics in sequence offered both the general public and the invited charrette participants a unique overview of how the world is changing and how these changes are interconnected.

The diversity of the presentations in conjunction with their visualizations was an overwhelming success; they reflected on the changes that will be coming in the next decade and on the shifts in our behaviour that must take place if we want to avoid global catastrophe. A number of themes emerged, which inspired the work of the charrette team that would materialize the following week.

The Guru Days offered a wide range of perspectives from both theorists and practitioners. The Gurus represented an international cultural diversity. While none of the speakers had the chance to confer before the event, the brief that had been sent to them allowed them to explore the topics and themes beforehand. This resulted in much food for thought for both the Milanese public and for online audiences to witness.

Revisiting the Gurus' presentations and conversations after the charrette had taken place reveals common lines of discourse that ran through the speakers' varied talks. It became clear that these themes had impacted the charrette teams in their deliberations, inspiring them to look at and understand certain objects and concepts that shape our lives.



GURUS & INSIGHTS

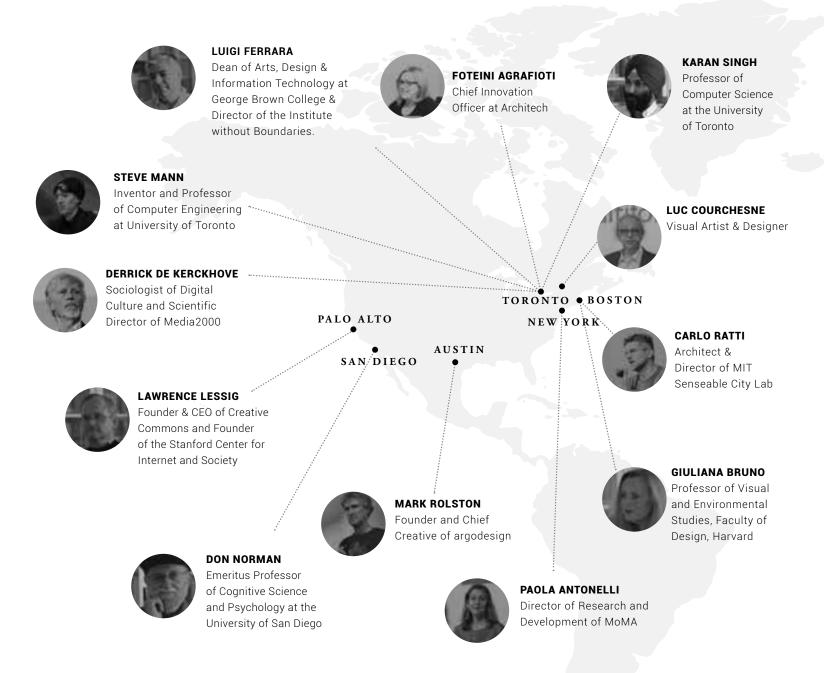


Each Guru brought a unique perspective on the future, which were a result of their areas of expertise, their place of practice, and their nations of origin. Their insights were an essential component for the event, as they helped contextualize the visions that the charrette participants would assemble over the following days.



GURU PARTICIPATION

While the Gurus come from around the world and from many diverse cultures, there was a definite emphasis on speakers who professionally practice in cities that are considered technological and communication hubs. These include: Palo Alto, San Diego, Austin, Toronto, New York, Boston, London, Amsterdam, Karlsruhe, Genoa, Montreal and Milan.





EXPERT COMMENTATORS



EMILIO COZZI
Vice-Director at Zero

Vice-Director at Zero, contributor at II Sole240re and Wired, columnist for RedBullGames, More Than a Game and Eurogamer.it



GIOVANNI ZICCARDI

Professor of Legal Informatics at the University of Milan, and Founder and the post-graduate Course in Computer Forensics and Digital Investigations.



MASSIMO SIDERI Innovation Editor at Corriere della Sera - writer

"WHEN I FIRST SAW THIS SPACE ELEVEN
YEARS AGO, I SAW THE PRESENT, PAST AND
FUTURE TOGETHER, I THOUGHT IF THE
TEMPLARS OF DIGITAL CULTURE NEEDED TO
MEET THIS WOULD HAVE BEEN THE PLACE."

MARIA GRAZIA MATTEI

DIRECTOR, MEET THE MEDIA GURU & FOUNDER, MATTEI DIGITAL COMMUNICATION

• Moderation of the presentations.

Maria Grazia convened the Meet the Guru Days: Special Edition, introducing the Gurus and reflecting on why and how they were chosen for the Future Ways of Living event. Her moderations built threads and links between the Gurus' chosen topics of discussion and made connections for the audience, which included online viewers. In addition, she hosted informal Guru dinners that became moments of sharing and discussion between the panelists. She also created a dialogue with the media to extend the discussions—through radio, television, web, and newspaper coverage—of the ideas presented.



GURU DAYS THEMES

THE NEW INVISIBILITY OF DESIGN

The Gurus discussed at length a new invisibility of design that is radically transforming traditional notions of what constitutes design. Traditionally, design translated the intangible into the tangible, and increasingly design is focused on the processes and operations which do not have a direct physical expression but rather are sequenced in time as information and experiences shared through varied physical touch points. The Gurus spoke about a future where these tangible touch points were potentially melting away entirely into a multi-dimensional cognitive reality that was invisible to us physically but psychically omnipresent.

Design will be radically transformed by the notion of *invisibility*.

In the coming years, more and more tangible elements will become touch points to an extraordinary array of digital interfaces, allowing to integrate new services within the natural world. According to the usability expert **Don Norman**, this trend is already

redefining user centered design. And we can expect it will explode with the diffusion of embedded sensors in our everyday objects.

The emerging world of invisible interfaces will be designed to capture our emotions (as described by Foteini Agrafioti) as well as to collect information on our health (as explained by Thomas Sutton). This meta-data will then be analyzed by expert systems in order to develop pro-active societal health care activities, rather than the current approach based on reactive interventions through acute care.

To liberate us from needy gadgets, "our environment — the rooms within the homes, offices, and public spaces we occupy - should become a computer that surrounds us," according to Mark Rolston. Invisible interfaces will also enable more frictionless customization.

Luigi Ferrara described this metaactivity where the world was being dematerialized to be rematerialized on demand to better meet peoples' needs and to allow for a sustainable resource utilization model that is dependent on invisible design instructions that guide the operative physical world.

This new invisibility of design influenced the Mobility project, developed by others during the charrette, with its data collection analysis and decision-making through sensors. The Food project looked at how information about where food came from would be as valuable as the food itself in helping with choices in an abundant world.

THE DIGITAL UNCONSCIOUS

A spectre is haunting the new media world. Our digital tools are creating an outer consciousness; a new entity that we still don't have the cultural and technological tools to manage.

As noted by **Derrick de Kerckhove**, this digital unconscious becomes more evident when we talk about privacy, transparency and identity: we live a new condition where more and more information of our lives are externally collected and stored and can be easily recalled and revisited.⁶

It is not only our personal lives that are changing. This digital unconscious is also transforming the financial world. The blockchain technology is propelling the birth of alternative currencies. As underlined by **Patricia de Vries**, this shift is creating a hybrid financial system where it is possible to track and archive every transaction.

Through this externalized unconscious, artificial intelligence — according to Mark Rolston — will soon begin to assist people in the making of almost all decisions by the end of the decade.

This shocking new reality was further driven home by the two robots **Emanuele Micheli** brought to the event. He gave insight into how we are in the process of "othering" our world with new artificial species that are both mechanical and biological.

The concept of a digital consciousness appeared in the Health and Wellness project as an Assurance system and in the Education project through a lifelong scholastic record. Both projects sported a mixture of real and virtual mentors that guided learners and patients. The Energy and Economy

project struggled to imagine our world in an era of intelligent automation, trying to predict how we would work together and what type of work would occupy humans vs. digital avatars and computing machines.

PARALLEL WORLDS

Virtual objects and other simulacra are becoming part of an alternate reality that is growing in influence in our lives and creating its own cosmology.

These parallel worlds are sometimes hidden, as suggested by Lawrence Lessig when he described the shadow world of lobbyists and influencers who had succeeded in corrupting the American political system. Or, they are intangible and visual, like the virtual reality constructions created by Marcus Wendt, designed to bring us a new aesthetic experience of another reality.

This new idea was well-explored by **Giuliana Bruno** when she described how the two-dimensional surface has always been a way to commit a new world to reality whether it was in the form of a book, poster, film, or on a computer screen. Her musings

on this space of appearance of creativity contrasted and resonated with Freddy Paul Grunert's call that we rethink reality as light, and on how our understanding of light could lead us to new parallel worlds that would enrich our perception of the one we currently live within.

The desire to transcend worlds with alternative versions drove the Communication team's vision for a new cultural industries development model based on a platform that co-ordinates local talent in the global marketplace. The Energy and Economy group also imagined a similar infrastructure to manage a new hyper-creative energy that will be needed to reduce the waste of physical energy in a resource-restrained future.

MULTI-DIMENSIONAL SPACES

The main recurring theme that the Gurus touched upon in their presentations was the multi-dimensional nature of space that characterizes life in the 21st century. This meta theme gathers into its fold the invisibility of design, the digital unconscious, and parallel worlds as

these other themes are made possible by the new spatial paradigm.

The space we live in is unavoidably multi-dimensional. We delve into a continuum that, according to Luc Courchesne, is not divided into intangible and tangible, but is instead an uninterrupted spectrum.

These new multi-dimensional spaces are already changing and enriching the offerings of museums, making them more relevant to the future, as Paola Antonelli brilliantly showed was the case for New York City's Museum of Modern Art (MoMA).

Through his futuristic short films on augmented reality, Keiichi Matsuda served up the best visions of how one might interact in a multi-dimensional space, while Karan Singh offered up a concrete example of how two-dimensional and three-dimensional web spaces could co-exist in his janusVR software. Italian architect Carlo Ratti described how critical it was to use information and sensor technology to design virtual and physical spaces in synergy. Canadian architect Luigi Ferrara described the process he developed called

Systemateks, which enables users to manipulate the language and information content of a design system to create multi-dimensional spaces that can change over time.

Steve Mann, who participated in the Guru Days even though he was physically absent, underscored the prevalence of multi-dimensional spaces. He spoke about the surveillance of space by forces of power and the "sous" veillance that citizens need to engage in to counteract the power imbalance of "sur" veillance. He called for "pre" valence, a form of anticipation and imagining of proper ways of watching the world that was at the root of what the Future Ways of Living project itself espoused.

All of the team projects attempted to work with this multi-dimensional spatial nature of our future. We live with social network platforms, knowledge management systems, personal computing devices and the internet in general and will need to co-ordinate these varied spaces to navigate our lives.

"THERE IS A SEPARATION BETWEEN THE REAL AND VIRTUAL IN THE DOCUMENTS THAT LIE INSIDE THE COMPUTER. IF WE ARE TRANSPORTED INTO THE VIRTUAL WORLD, WE CAN DO THINGS THAT MIGHT NOT OTHERWISE BE POSSIBLE"

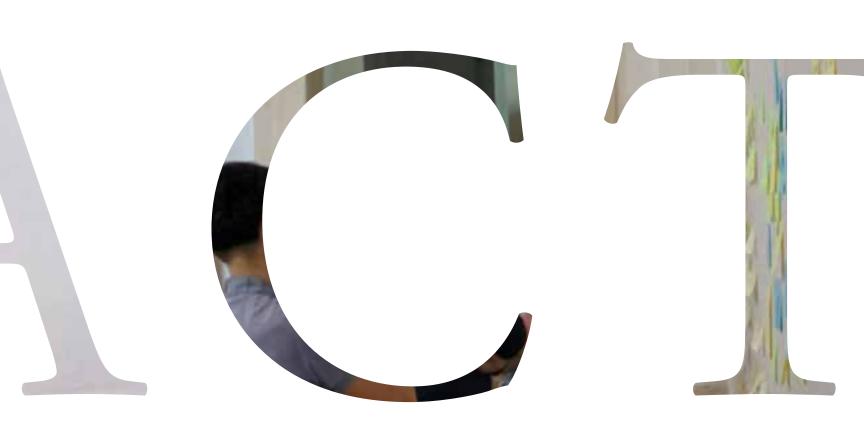
KARAN SINGH

PROFESSOR OF COMPUTER SCIENCE AT THE UNIVERSITY OF TORONTO

• Creating immersive, multi-dimensional spaces that facilitate collaborative experiences

Karan Singh, Professor of Computer Science at the University of Toronto, displayed the current work of Janus VR, a multidimensional Internet browser. The current Internet framework, Singh explained, was based on a thirtyyear-old model. It is now time for a redesign. Singh and his team at Janus are attempting to create a new browser that combines the 2-D pages of the traditional web with a 3-D environment. This new browser would be a space where users can explore and meet others.







GLOBAL COLLABORATION

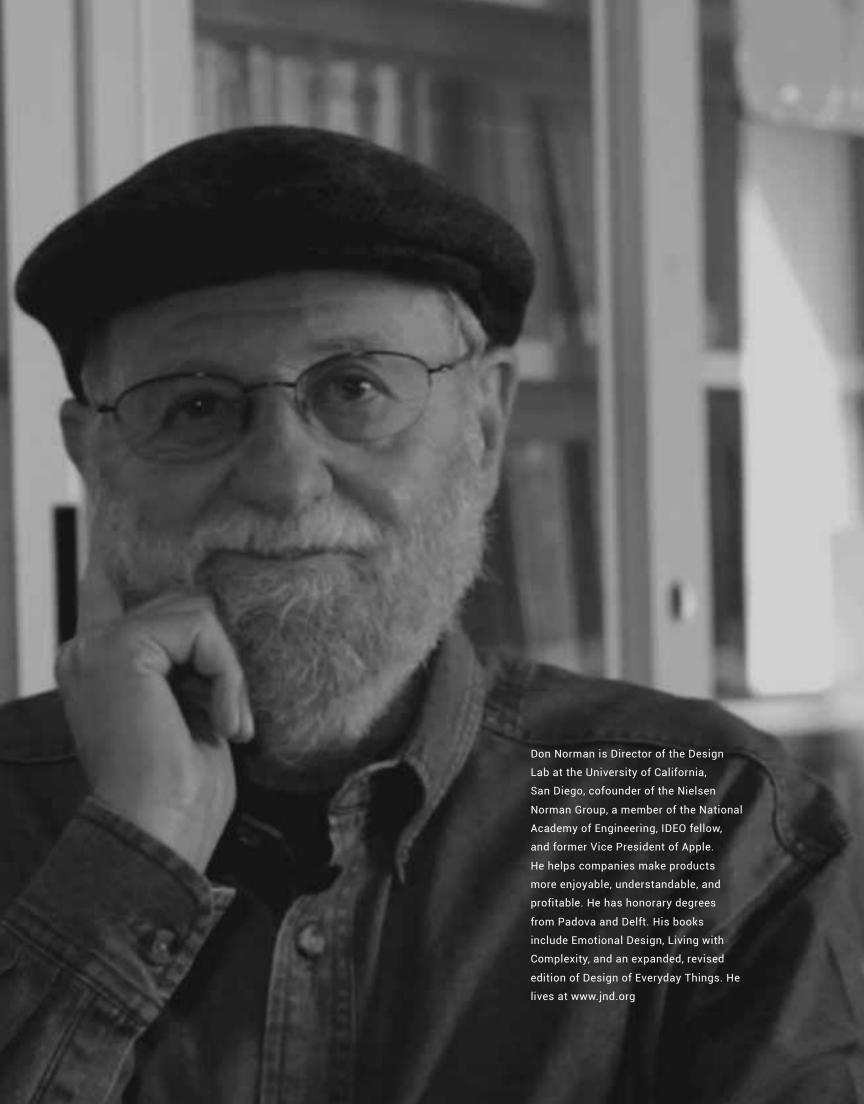
"I THINK DESIGNERS ARE BADLY MISUNDERSTOOD. ONE PROBLEM IS THE WORD "DESIGN" - WHAT DOES IT MEAN?"

DON NORMAN

PROFESSOR AND DIRECTOR OF THE DESIGN LAB AT UNIVERSITY OF CALIFORNIA, SAN DIEGO

• Design is a way of thinking and approaching the great social and technological challenges of the twenty-first century.

Don Norman, Emeritus Professor of Cognitive Science and Psychology at the University of San Diego, stressed that there is no better question than a stupid question. Norman recalled his prolific career in both education and business to underline the importance of the designer. Designers do more than make things look pretty, he said, they ask the questions no one else bothers to.



THE CHARRETTE

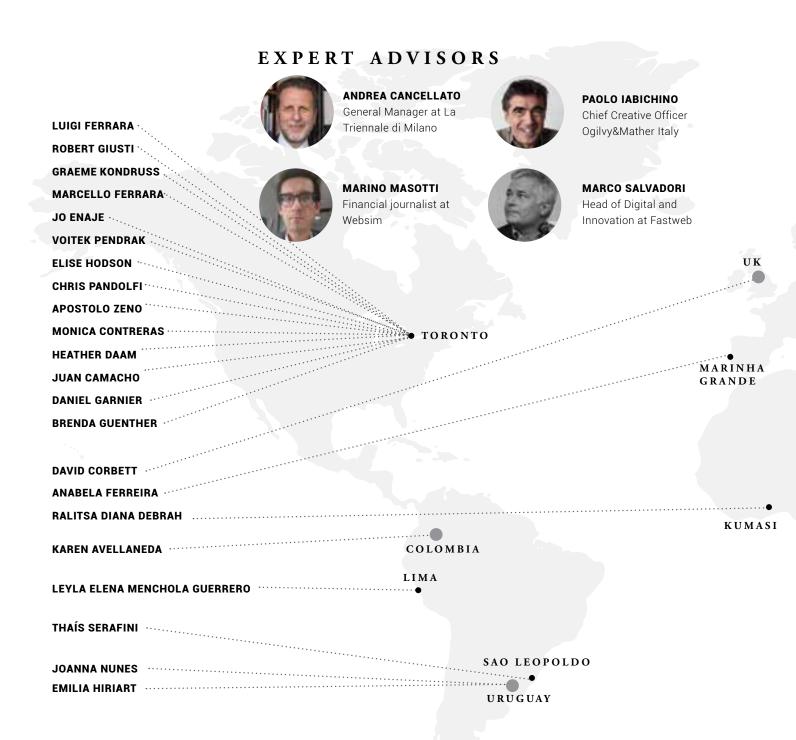


After watching the Gurus share their visions of the future, participating creatives were tasked with creating visions of their own. In an intense, five-day process, architects, engineers, urban planners, and designers formed interdisciplinary teams that envisioned the futures of Mobility, Communication, Energy and Economy, Health and Wellness, Education, and Food.



CHARRETTE PARTICIPATION

Teams were comprised of thinkers and visualizers from sixteen different countries, making the event a true reflection of the spirit of both the Expo and McLuhan's Global Village.



EXPERT ADVISORS



ANNA MERONI Associate Professor of Design, Politecnico di Milano



ANDREA REBAGLIO Art and Culture Vice-Director at Fondazione Cariplo





MARIA CRISTINA PAPETTI Head of Sustainability Projects and Practice Sharing, Enel S.p.A.



ALESSANDRO RUBINI Programme Officer, Progetto IC-Innovazione Culturale, Progetto Distretti Culturali

CHIARA MINOTTI ROBERTA POLITO

VALENTINA ALTAMURA Roberta

VALENTINA GIULIA MARIA BIANCHI ELENA TURETTI

GIULIA SALVADORI ELISABETTA CANAVESIO GIANMARCO LUGGERI FEDERICO CURCIOBENEDETTA FANTINI ST. PETERSBURGALESSANDRA GALLI JACOPO GROSSI-POMETTI ZHILU HU MARIA GOTTI MARCELLO MOLINARI

······ AHMET ERHAN KAHVECI TURKEY BANGALORE

> YARA AL-ADIB THIRUVALLA

EXPERT ADVISORS



• MILAN

LUISA COLLINA Full Professor, Head of the M.Sc in Product Service System Design at Politecnico of Milan and President of Cumulus International Association of Universities and Colleges of Art, Design and Media



CRISTINA CHIAVARINO Art and Culture Director at Fondazione Cariplo



CARLOTTA DE BEVILACQUA Artemide Vice President



OSCAR DI MONTIGNY Head of Marketing, Communication and Innovation at Banca Mediolanum spa

LIJO JOHN MATHEW

"THE FUTURE OF DESIGN IS ABOUT DESIGNING WITH PEOPLE, NOT FOR THEM. THE FUTURE ROLE OF THE DESIGNER LIES IN FORMULATING SYSTEMS THAT EMPOWER PEOPLE TO CREATE DESIGNS FOR THEMSELVES—DESIGNS THAT CAN TRANSFORM OVER TIME."

LUIGI FERRARA

DEAN OF ARTS, DESIGN AND INFORMATION TECHNOLOGY AT GEORGE BROWN COLLEGE AND DIRECTOR OF THE INSTITUTE WITHOUT BOUNDARIES

• Redefining the methods of generating design in a sharing economy

Luigi Ferrara, Director of the Institute without Boundaries, opened the Guru Days with a spirited talk on rethinking the future of design. With examples from his own design work and projects he led at the Institute without Boundaries, including the Canühome, a completely renewable modular home and scalable

homebuilding system, Ferrara showed that designers can enable people by creating tools for them to design their own world. Ferrara called this design philosophy Systemateks and encouraged designers to think systemically and to empower people creatively.





DESIGN CHARRETTE

Following the Guru Days, teams engaged in an integrated design process that built upon ideas and insights gained from the Guru lectures to create projects that would illustrate Future Ways of Living.

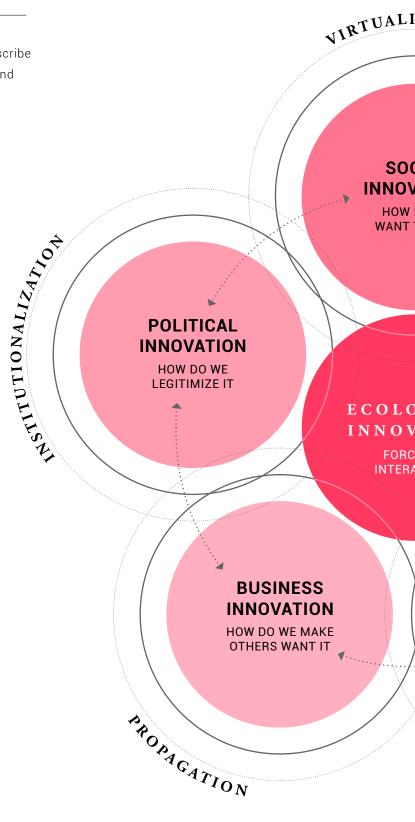
The design charrette was conceived by the Institute without Boundaries as an exercise in reimagining our societal systems. Meet the Media Guru discussions focused on six key systems that, when imagined together, would provide a picture of life in 2025. Key to the exercise was the development of a design brief that focused on how we wanted to live, followed by an examination of how technology, design, and business models could make the desired changes possible. To do this effectively, IwB asked charrette participants to follow its ecology of innovation methods, which looks

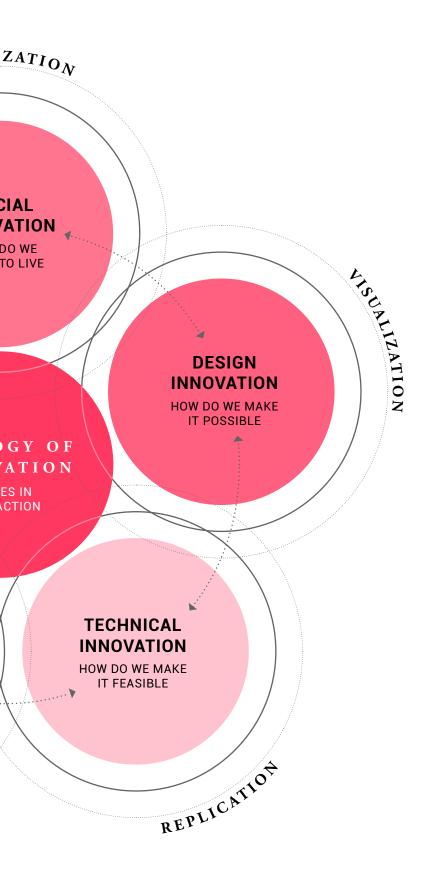
at how we want to live (social innovation), reimagines formats (design innovation) that are supported by available technologies (technical innovation) that are propagated (business innovation) until they are accepted and entrenched in laws (political innovation).

This ecological systems approach was used by the groups to tackle the key themes and was reflected in the work that was created during the charrette. It looked not only at design, but at change processes, business models, and technological impact.

ECOLOGY OF INNOVATION

The ecology of innovation diagram was developed to describe the multi-dimensional aspects that support innovation and make it possible.





The charrette teams explored interrelated themes that developed aspects of our physical and social infrastructure. All the themes were examined from both of these perspectives, which resulted in proposals that were neither merely technocratic nor exclusively processoriented. The Institute also used some of its key design methods and tools to guide the work of the charrette teams.

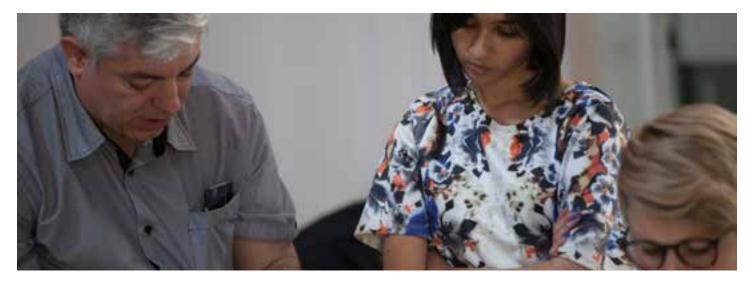
KEYS TO THE PROCESS

- The art of timelining transformation, which charts the transformation of systems
- Synthesizing and understanding temporal frameworks that were part of the overarching schema from past to future conditions
- The development and testing of scenarios
- The organization of systems diagrams at macro and micro levels

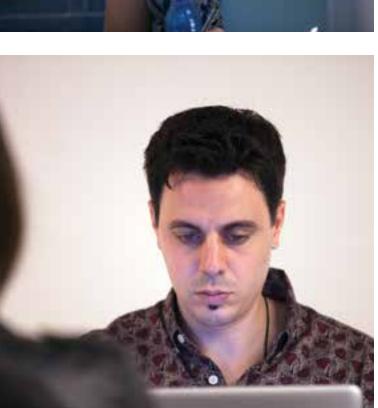
- The identification of change objectives and tactics
- The development of an overview of the ecology of innovation required to transform current to future conditions

Only IwB facilitators had been formally trained in these techniques. It was amazing to see how naturally, people of different ages, diverse professions, varied cultures, and unique levels of experience could come together and devise plans using IwB techniques to solve critical societal problems.

In the span of five days, teams worked tirelessly to understand the current systemic problems, scouring history for valuable precedents, surveying the current landscape for signals of change, understanding growing trends that offered solutions, and developing prototypes that integrated the new-found knowledge.





















By the third day of the charrette, the teams were asked to present their work to each other in a formal presentation at the end of the day. This gave teams the chance to survey the creative activity of other teams, see their own ideas in the context of the others, and reflect on synergies, similarities, missed opportunities, and different presentation and communication tactics. The presentations were thought-provoking and clearly indicated the preoccupations of each group. As a whole, the teams identified the need for a global path to equitable access and distribution of systems infrastructure. This was the first "aha" moment. Our group of global participants had attempted to create a blueprint for a Global Village – a concept that had been created a little over half a century earlier.

Over the next two days, the teams were able to pull together visuals

and text that would help form the content of this book. By the end of the week, each team had twenty pages describing their proposal and its significance. On the final day, the work was pinned to the walls of the Mediateca on A4 sheets, creating an incredible tapestry of insight into Future Ways of Living. The teams roamed from presentation to presentation beneath the dome of the Mediateca, moving from one wall to another in a circular motion—it felt as though participants were planetary objects orbiting around ideas.

The following pages of this book will provide a day-to-day breakdown of the charrette's working process, which led to the resulting projects. We will then present the results of the charrette. This book has been edited for continuity and cohesion, to give an overview of the visions for system evolution that were charted during Future Ways of Living.

CORE CHARRETTE PROCESS

The core charrette process is an intensive, co-creation process. During this process, teams worked through ideation, iteration, idea development, and refinement over a short period of time to develop innovative ideas.

IDEATION

Teams were encouraged to discuss and develop ideas, while completing a series of activities related to futures thinking, timelining, trend analysis, and conceptual design.

CREATION OF A FUTURES FRAMEWORK

Teams created their vision and futures framework by identifying their themespecific goals for the future system.

ESTABLISHING VALUES FOR THE FUTURE

As a result of the futures framework, teams began to identify values that were essential to Future Ways of Living.

IDENTIFICATION OF A CORE VISION

DAY

1

Toward the end of day 1, teams began to develop a core vision that would guide the iteration of concepts during day 2 of the charrette process.

100 IDEAS: SUPER-SOLUTIONING

Teams developed ideas for the future, which were centered around scenarios that would address the goals identified in the futures framework, and aligned them with the values they shared and identified.

ITERATION

After developing an initial project direction, objectives, values, and vision, teams were forced to iterate design scenarios quickly, while continuing to add depth to their projects through whole systems thinking.

TESTING IDEAS WITH USER PERSONAS

Teams created and utilized user personas to consider how the concept(s) would impact the daily lives of target demographics.

VISUAL PROTOTYPING & PROJECT SUMMARY

DAY

Toward the end of day 2, visual designs and more refined summaries of each of the projects emerged. This included digital environment renderings, project diagrams, timelines, and visualization of the futures framework.

SYSTEMS THINKING & DIAGRAMMING

To analyze and build upon designs, teams considered the complex systems that could contribute to, impact and/or influence the proposal. Teams also created diagrams to illustrate the components of the proposal and how they work within a larger context.

COMMUNICATION

Day 3 required the teams to quickly package, visualize, and communicate their ideas. This culminated in a series of short presentations, which helped to identify gaps, synergies, and opportunities for improvement.

DAY

PRESENTATIONS

Each team had ten to

fifteen minutes to present

their final proposals. This

showcased the projects

of all teams and enabled

participants to envision

holistic vision of Future

Ways of Living.

their projects in the larger,

STORYBOARDING & SCENARIOS

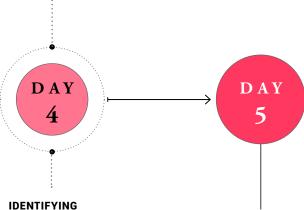
To visualize and communicate concepts, storyboards and scenarios were used as a storytelling method. This created a clear narrative for each project proposal.

PACKAGING FINAL CONCEPTS

Final visualizations, diagrams, timelines and other content were packaged into short, digital presentations.

REFINEMENT

Coming together at the beginning of Day 4 to discuss strategies for improving concepts, teams spent the remainder of the charrette refining and documenting ideas into a series of spreads for this final publication.



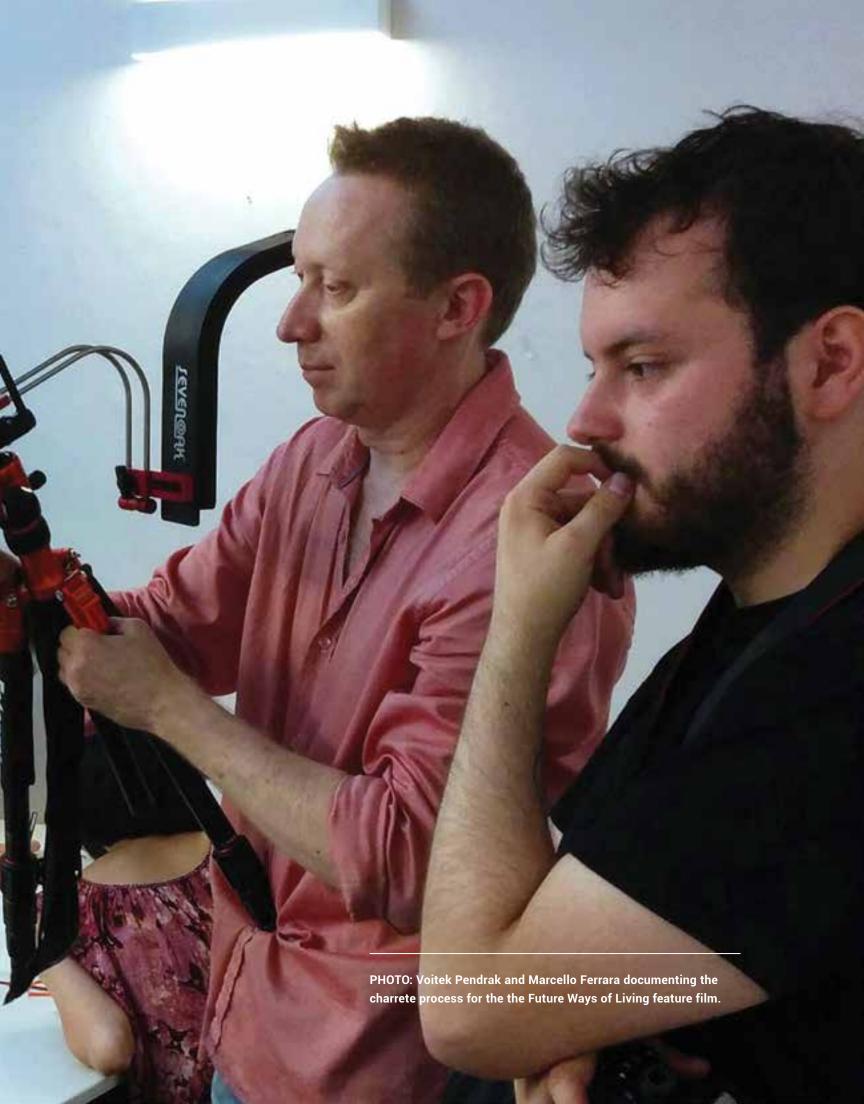
IDENTIFYING SYNERGIES & NARRATIVES

To further refine the concepts presented at the end of day 3, teams worked together to build holistic narratives, identify synergies between ideas, and inspire each other to push boundaries and figure out project details.

PROJECT PUBLICATIONS

Rather than presenting the work in typical presentation style, teams were required to create a twenty-page document that summarized their project. These were printed and shared among the group to conclude the charrette process.





"NO SYSTEM WILL BE SUCCESSFUL IF YOU'RE NOT WORKING AT THE BASIC LEVEL OF THE INDIVIDUAL OBJECTS AND INTERACTIONS THAT MAKE UP THE SYSTEM"

THOMAS SUTTON

EXECUTIVE CREATIVE DIRECTOR, FROG WWW.FROGDESIGN.COM

• Digital tools for health are reshaping a human-centered model of health care.

Thomas Sutton, creative director at frog design, explained that new solutions also bring with them new challenges, especially in the field of health care. Because health care has evolved to effectively treat

infectious disease and injury, it has become poorly equipped to treat chronic diseases. Digital technology presents opportunities for doctors to empower their patients in managing their illnesses.



"A LOT OF PEOPLE TALK ABOUT HOW AND WHEN AUGMENTED REALITY TECHNOLOGY WILL BE IMPLEMENTED, BUT I THINK THE KEY QUESTION IS WHY."

KEIICHI MATSUDA

ARTIST AND DESIGNER

 Hyper-reality and the future of synthetic digital spaces that augment our physical environments.

Keiichi Matsuda, designer and filmmaker, narrated a series of vignettes about people—a designer, a shop owner, a lifestyle celebrity—struggling to find a footing in the near future. The vignettes were accompanied by surreal gifs of Matsuda's films. The future world he described

was a strange, frightening, and plausible extension of our own.

Matsuda concluded his narratives by discussing the power of storytelling in design. Designers need to not only create products, he said, but provoke conversations, ask questions, and be critical of the future.



MOBILITY



Mobility is our ability to move in space. It allows us to travel, socialize, trade, and explore. In the near future, we must consider private vs. shared, high-tech vs. low-tech methods of transport, and the equality of access to transportation at scales ranging from the local to the international.



BACKGROUND

OVERVIEW

Mobility is how we get to and from different locations, allowing us to reach destinations, socialize, increase economic development, and explore environments.

While most people can identify with physical forms of mobility, digital mobility is less understood. And yet digital mobility is becoming increasingly important in our society and will likely play an important role in the future. Our team believes that

the evolution of mobility both at the physical and digital level is essential to improving quality of life, as it will allow us to have more free time, be more productive, and be happier while on the move.



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FAIT PARE

2005

FUTURE WAYS OFLIVING



#1 CULTURA

AMBIC

BACKGROUND

TIMELINE

The timeline below provides a simple overview of some of the key innovations that have shaped the way we move. The introduction and adoption of these modes of mobility are tied to key innovations and advancements in current technology.

WALKWAYS

The most basic form of mobility is the human ability to walk, utilizing natural energy to move between destinations along paths.



• RAILWAYS

Building upon the innovation of the steam engine and industrialization, the train increases efficiency of travel on land and creates regional and national connections.

This also sparked more modern forms of mobility, including subways and trams.



1800

• WATERWAYS

Waterways allow us to circumnavigate the globe, traveling long distances over water, which had previously been a major barrier for travel between large bodies of land. This form of mobility still exists today in many forms, for leisure, travel, and distribution of goods.



• ROADWAYS

The automobile is likely the most impactful innovation in mobility within the twentieth century, affecting the way we move, plan cities, and live our daily lives. This was brought about by innovations in modern assembly, the internal combustion engine, and the availability of fuels.

1900





• AIRWAYS

Moving from the ground to the air is a major achievement in mobility, sparked by the Wright Brothers' innovations. This transforms the way we travel both regionally and internationally and significantly decreases the difficulty of long-distance travel.



AIRWAVES

The Internet and modern infrastructure associated with wireless technologies have facilitated mobility in new digital forms, reducing the need to travel physically. These systems are contributing to the collection of data and the Internet of things.

SMARTWAYS

We are beginning to develop systems that allow for driverless vehicles, which will result in smartways. These will allow various modes of mobility to communicate with one another, creating a more efficient and interconnected system of mobility.







• BIKEWAYS

Seeking new ways to utilize roads previously used primarily for cars, we have begun to rethink mobility within urban centres to provide a more user-friendly experience. Bikeways and the addition of bicycle lanes are a key component of this change.

BACKGROUND

MOBILITY CHALLENGES TODAY

TRAFFIC CONGESTION

Congestion is one of the most prevalent transportation problems in large urban centres. The mass production/ affordability of the automobile and the increase in population density has resulted in overcrowded infrastructures that are no longer functioning properly. This contributes to longer commute times and corresponding stresses, which result in production losses. "Looking ahead to 2031," Metrolinx reports, "these costs to commuters in [the Greater Toronto and Hamilton area] and the economy will balloon to \$7.8 billion and \$7.2 billion, respectively."7 The same can be said to some degree about most metropolitan areas, including Milan.

POLLUTION

Presently, mobility is one of the primary contributors of pollution within our cities, causing noise, air, and visual impacts on our environment that cause our health to deteriorate. With most vehicles still reliant on fossil fuels, increased congestion and reduced efficiency contributes to the pollution in our urban space. This has major global impacts. For example, according to the Asahi Shimbun newspaper, "Spending a day [in Beijing] when smog blankets the city and the air pollution

is severe is equivalent to smoking 21 cigarettes, or about a pack a day."8

COORDINATION & UTILIZATION

While we have more mobility options than ever before, our individual mobility options do not synchronize and are often underutilized during off-peak hours, increasing the cost of infrastructure, fleet requirements, and staffing of public transport. The emergence of a sharingeconomy infrastructure has started to remedy this. There are significant opportunities to improve the communication between transport systems and their users and to improve the efficiency of existing transportation modalities. This opportunity exists in both the public and private realms.

COMPLEXITY

As transit modalities are increasingly diversified and extended by new vehicle choices to provide support and relief to congestion within existing mobility systems, users have more options to get from point A to B. However, these options are often confusing, adding to the complexity of navigating the city and further complicating the coordination between the various systems of mobility.



OVERVIEW

Synchronicity is a seamless, smart mobility system that caters to the global citizen.

Synchronicity is a smart and synchronized mobility system that has two key functions. The first function allows users to seamlessly move between systems of transportation along their journey, automating payment, and customizing the user experience. The second function is it creates an overarching tracking and information operating system, which compiles data from users, mobility systems, and mobility infrastructure to create a more efficient and smart system that adapts to the patterns and needs of users.

THE USER EXPERIENCE

The system allows users to tap the full potential of seamless mobility. As users walk into the metro, they are automatically detected, payment is processed, and the system tracks customers' travel routines. A wearable on the user and a transponder within the existing mobility system communicate with each other, tracking usage of the system and suggesting connections to create a more convenient and rich transportation experience.



PREDICTIVE TRENDS

ENERGY:

The world is becoming conscious.

With the price of fossil fuels increasing and the overwhelming amount of research on the negative impact of pollution on our environment, we are turning toward alternative forms of energy that are more sustainable. The emergence of electric vehicles (EVs) and hybrid vehicles are a step toward a cleaner future, while technologies associated with energy production and distribution are transforming the landscape (e.g. piezoelectric, solar highways, inductive/wireless charging).

INTERNET OF THINGS: The world is becoming interconnected.

The Internet of Things combines everyday objects with embedded sensors, electronics, and software or tracking devices in order to create added value by exchanging this data with other devices. According to Gartner — a technological research company — there will be 26 billion connected devices by the year 2020.9 This will enable various systems of mobility to communicate and will increase efficiency of existing resources and infrastructure

BIG DATA:

The world is becoming instrumented.

Mark van Rijmenam, entrepreneur and Big Data strategist, recently pointed out that "90% of all data ever created, was created in the past two years. From now on, the amount of data in the world will double every two years." This data is being collected from our environment, its inhabitants, and nearly everything that is connected.

AUTONOMY:

The world is becoming intelligent.

Autonomous robots and intelligence systems are changing how we move. New technologies and innovations in this field are impacting mobility systems radically (e.g., driverless cars).

VEHICLES:

The world is becoming customizable.

Innovation in personal and shared mobility modes are creating smaller, more efficient, modular vehicles that improve the user experience. We are now better able to utilize existing infrastructure systems. Vehicles are also becoming smarter and more connected.

"Forward-looking companies will redefine themselves and move from being just car and truck manufacturers to become personal-mobility companies. We will be thinking more intelligently about how the vehicles we build interact with one another and with a city's infrastructure."

-BILL FORD (EXECUTIVE CHAIRMAN, FORD MOTOR COMPANY)

A FRAMEWORK FOR THE FUTURE

Predictions for technological advancement in transportation and mobility were abundant during the twentieth century; futuristic visions gained particular strength during the mid-century, when technologies in mobility took a major turn. During this period, the car, road, and gas system decentralized settlement away from city cores. Today, we are at yet another turning point—one where these innovative visions, which at moments seemed far fetched, including driverless capabilities and communication between vehicles and microvehicles, are fast becoming realities. Our team believes that such technology will transform the way we move over the next ten years.

The diagram on the right illustrates some of the key emerging innovations that may impact mobility over the next decade.

While it is inevitable that innovations will transform the way we move in 2025, we must also direct these changes and define how we want the world to evolve. Below are brief statements that paint a picture of how we want these technologies to shape mobility.

The transportation system of the future should be:

SEAMLESS

A system that allows users to move seamlessly between different modes of transportation at a global scale

- Frees time to increase productivity
- Synchronizes multi-modal

requirements to ease commutes

- Tracks and anticipates user needs
- Moves across boundaries with reciprocity and openness of use

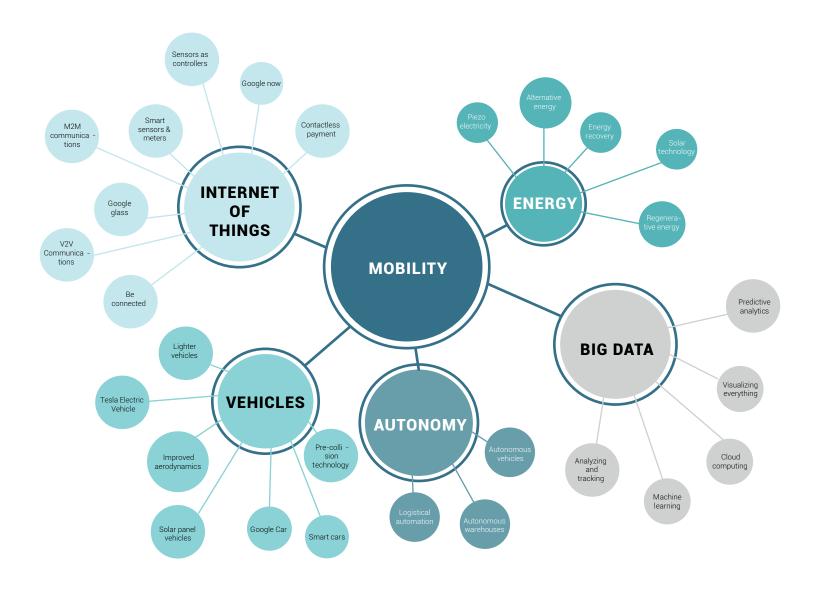
CUSTOMIZABLE

A system that adapts to the individual, the group, and the city to create an enhanced user experience

- Creates unique travel experiences and options to cater to the individual or group
- Enhances potential revenue generation
- Creates suggestions for mobility options/destinations
- · Improves quality of life

EFFICIENT

A system that frees time, utilizes existing resources more effectively, and adapts to renewable energy sources



SYSTEMS DIAGRAM

There are three key components that allow this system to function:

- A user device that can take advantage of existing technologies or current devices that are used by the general public
- Environmental transponders/ sensors that are affordable parasitic elements that make mobility systems and environments smart and connected
- An operating system that compiles and processes data from users and the environment to create a smart system

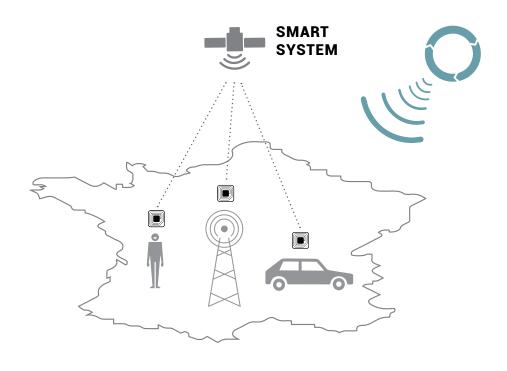
Synchronicity orchestrates the multiple transportation system through its intelligent decision-making system and big data. The data is collected through wireless communication that consists of RFID (radio frequency identification) transponders, GPS (global positioning system) base stations, and routers.

Each transportation system element has its own RFID and GPS. The GPS is used for geolocalization. Once the localization is complete, the information is kept as tags within the RFID.

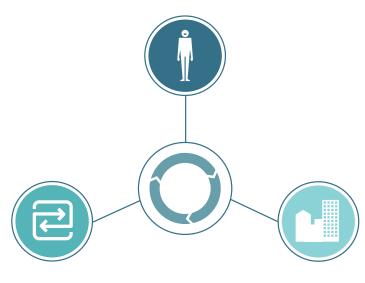
RFID works through the transmission of radio waves between a receiver and a transponder. Transponders could be existing base stations, routers, or special RFID antennas. Once the data has been received by the transponders, it is then sent to the server. The data is processed and analyzed and then re-sent to users, identifying the available and efficient travel options that are part of the system.

This enables communication between the different components.

The user will be able to get the information about possible transportation options through the operating system.



USER DATA



ENVIRONMENT DATA

CASE STUDIES

1. AN INCLUSIVE AND ACCESSIBLE SYSTEM

Mike's personalized profile is constantly updated. The interface provides the user with a customized experience that adapts to his needs. In this instance, the Synchronicity interface guides Mike to the best exit, while interactive and targeted information is displayed on the subway exit doors to direct him to the accessible elevator. Furthermore, his subsequent travel options, including an accessible autonomous vehicle ready to pick him up and drive him toward his destination, are all within reach.

2. A SMARTER WAY TO MOVE

Lorenzo has an important trip planned and needs to make it to his destination quickly, taking multiple modes of transportation. As his trip is instantly synchronized with his calendar, his ticket purchase is updated to his transportation schedule, including directions to his next bus stop and airport gate (all displayed in real time). As he steps off the train, screens located along the platform sync with his transponder, showing him where to go next and how he is doing for time.

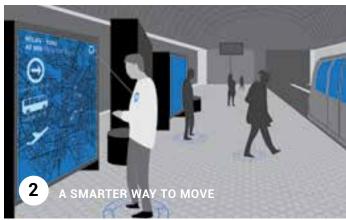
3. MULTI-MODAL SYNCHRONICITY

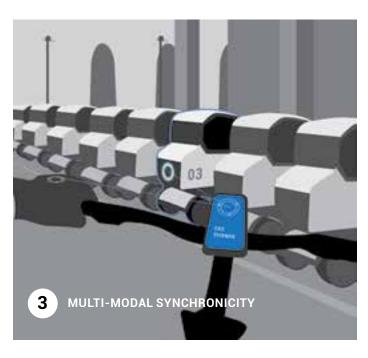
Linda is going to meet a friend in a nearby town. She hops on a shared bicycle system after work and is directed to a shared car system that has been automatically booked and assigned to her. As she approaches the vehicle, she gets in the car, and it drives her to her final destination while she reads a book. Her schedule is also synced with the car, which goes to a charging station before picking her up after dinner to take her home.

4. A CUSTOMIZABLE EXPERIENCE

A number of die-hard Inter Milan fans are headed to San Siro Stadium to watch a game against Juventus. The metro identifies that they are all ticket holders, scheduled to attend the game. The interior of the subway responds by presenting the fans with team content, including live streams of warm-ups, player interviews, and behind-the-scenes footage. These features are a great way for added revenue for the system, and a great opportunity for business exposure. Businesses can pay to showcase their unique media on various touch points.









CONCLUSION

Our current methods of transporting people, their ideas, and products are falling behind the demands of a globalized world. Integrating data into our models of mobility will improve how we move.

The Synchronicity system allows us to harness technology to facilitate transportation practices both mentally and physically. By using data collection and integrated user devices, users will seamlessly access

the components of the transportation systems. In the future, users will not have to struggle to make the system work for them; rather, their trajectories will flow intuitively along with that of traffic.

SYNCHRONICITY

OUR TRANSPORTATION SYSTEM
WILL CONSIDER BOTH CORPOREAL
AND NON-CORPOREAL FORMS
OF MOBILITY BY MOVING
INFORMATION, GOODS, AND PEOPLE
IN A SYNCHRONIZED MANNER AND
BY USING TECHNOLOGIES THAT
COMMUNICATE WITH EACH OTHER,
MINE DATA, AND PROVIDE EXPERT
SUGGESTIONS FOR CONNECTION
AND MOVEMENT.



THE MOBILITY TEAM

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Design & Engineering, Politecnico di Milano

Alice Giorgio

Researcher for Sustainable Development, Enrico Mattei Eni Foundation

"WE NEED TO TEACH YOUNG GENERATIONS WHAT ROBOTS ARE AND THAT THEY ARE DIFFERENT FROM US."

EMANUELE MICHELI

VICE PRESIDENT OF THE SCHOOL OF ROBOTICS IN GENOA

• Showcasing robotic technologies and imagining their use in the future.

Emanuele Micheli, Vice President of the School of Robotics in Genoa, ended the first Guru Day with a demonstration of current robotics. With two adorable robots, Micheli illustrated both the progress and limitations of robotics today

and offered a vision of how they might be used to help humanity in the future. But for that future to succeed, Micheli stressed, the field of robotics needs to look beyond engineering and into other disciplines and fields.



"IF THERE'S A FUTURE FOR DEMOCRACY, IT'S A FUTURE OF EQUALITY—AN EQUALITY THAT RECOGNIZES THE EQUAL VOICE OF CITIZENS REGARDLESS OF RACE, SEX AND WEALTH."

LAWRENCE LESSIG

FOUNDER AND CEO OF CREATIVE COMMONS AND FOUNDER OF THE STANFORD CENTER FOR INTERNET AND SOCIETY

• What will democracy look like in ten years, how can we curb corruption, and facilitate the development of policy?

Lawrence Lessig, founder and CEO of Creative Commons, discussed the current state of democracy, specifically in the United States.
Lessig argued that despite whatever politicians say, Americans do not live in a democracy, and he brought the evidence to prove

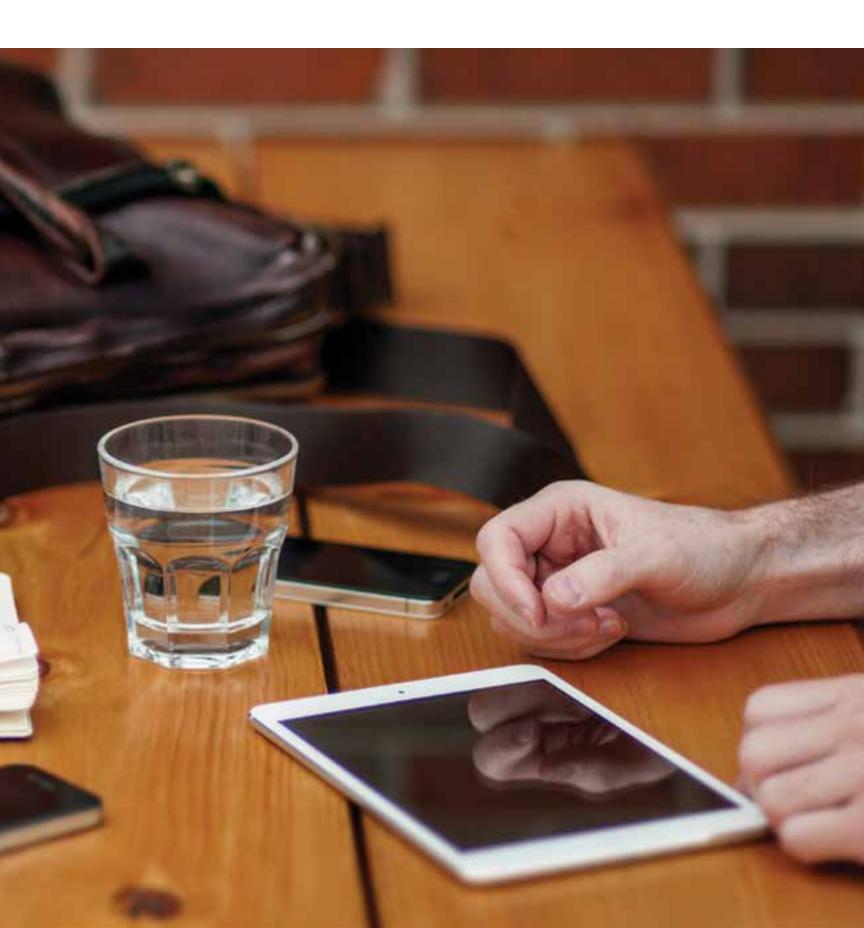
it. Lessig argued that the Internet represents the best chance to not only educate people on inequality, but to reform the entire political system so that every citizen, regardless of race, class, and gender, has an equal voice.



COMMUNICATION



Communication enables us to share information, increase understanding, explore productivity, and build connections. We must consider the social spaces of the future and how we will interact with one another in a world where geographical boundaries no longer decide who we can interact with.



BACKGROUND

OVERVIEW

We are living in a networked society. Over three billion people on earth are connected to the Internet and seven billion are now mobile phone users. Social media networks are playing an increasingly significant role in people's lives. Technologies are also changing the ways we share information:

We are interested in the following trends that define communication today:

SOPHISTICATED ALGORITHMS

Dating sites and professional services like LinkedIn's "Recruiter"¹⁴ match people based on their online data.

Consumer interests can be quantified with impressive precision.¹⁵

NETWORKED OBJECTS

Wireless sensor networks, GPS, RFID and other smart tagging systems are creating an increasingly integrated Internet of Things.

THE SHARING ECONOMY

Households, small businesses, and public institutions can now profit from sharing use of under-utilized equipment.

THE CULTURE OF MAKING

Rapid prototyping and programming have become more accessible to smallscale makers. Startups can now engage more easily in offshore production.

THE CULTURE OF THE COLLECTIVE

Collective-focused initiatives are gaining ground with activities like crowdfunding, crowdsourcing, and co-designing.
Cloud-based tools for collaborative work make these options widely accessible.

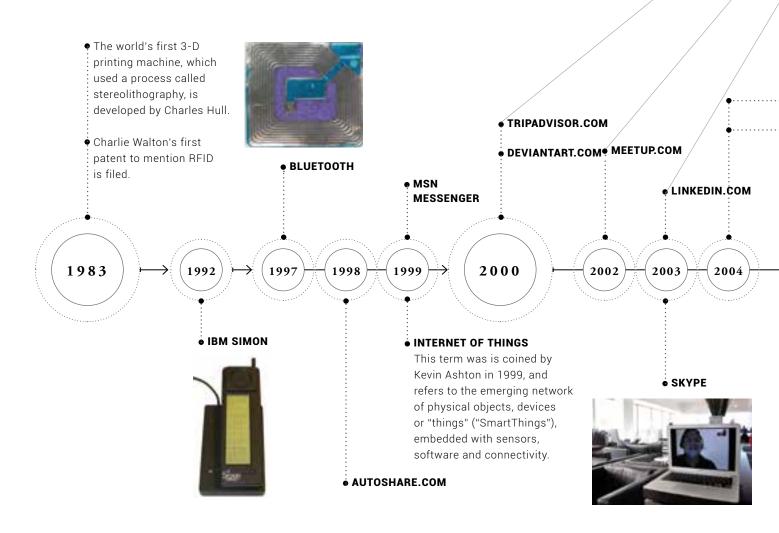
How will these trends impact the way we communicate in the future? Can we enable new types of collaboration? New, more meaningful relationships? New forms of creativity and culture that benefit creators and consumers equally?

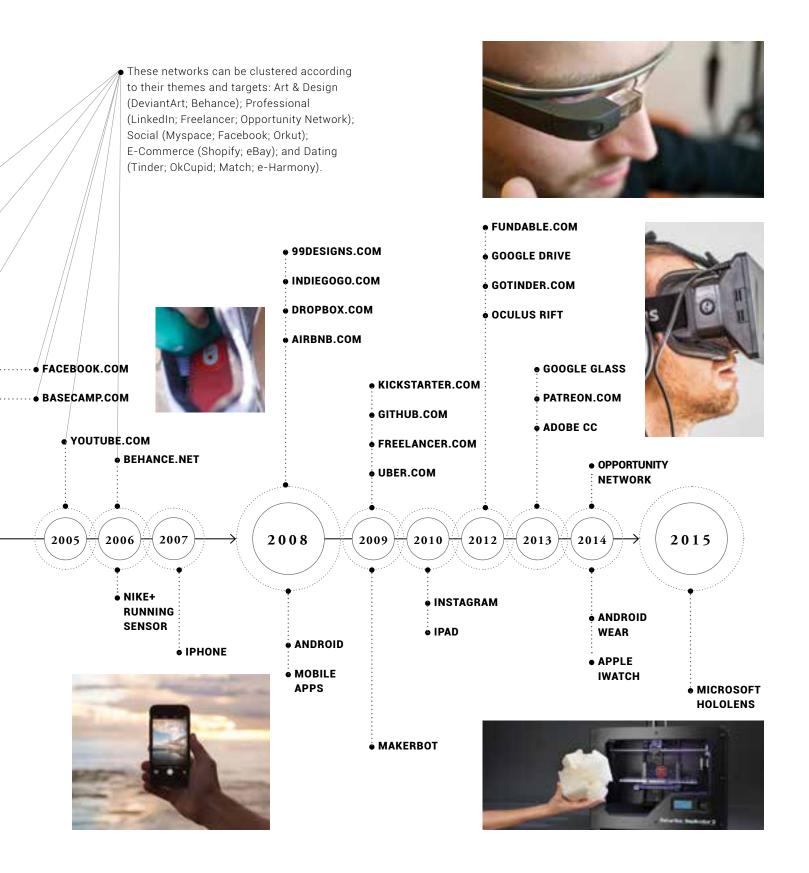


BACKGROUND

TIMELINE

This timeline shows the origins of some of the most prevalent web platforms. These encompass social media networks, sharing platforms, crowdfunding, and crowdsourcing websites. Important steps in the evolution of communication technology are mapped alongside them, from the 1980s to the present.





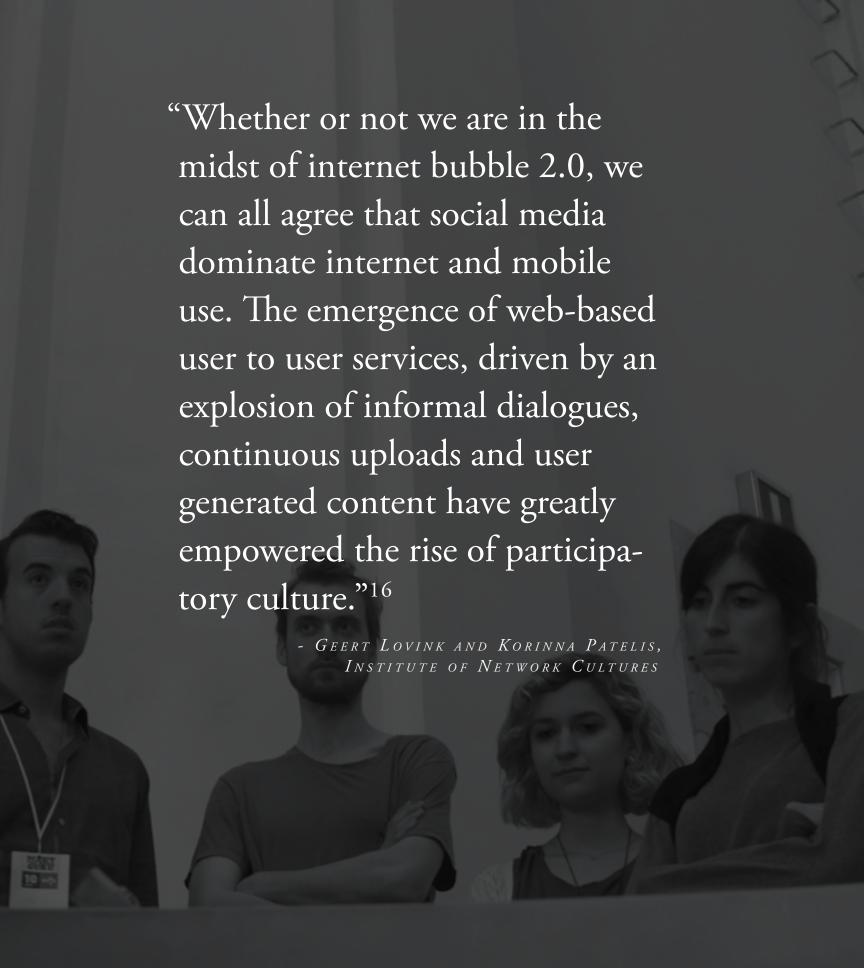
BACKGROUND

COMMUNICATION CHALLENGES TODAY

We propose a communication system that addresses the following conditions and assumptions for 2025:

- The employment landscape will be defined by an insecure labour market with more contract and freelance work. Income instability and a lack of benefits and rights will become more prominent issues. This workforce will be expected to be more mobile, flexible, and resourceful.
- Employment in urban centres will emphasize creative industries and innovation, especially as work is increasingly mechanized, and as governments, universities, and the private sector continue to support entrepreneurship and incubators across Europe and North America.
- Complex problems and chains of manufacturing will require interdisciplinary teams who work

- globally and understand how to collaborate across cultural and national boundaries.
- Sophistication and distribution of technology will increase substantially, but individuals and small companies may not have access to these resources for economic and geographic reasons.
- Big business will continue to undermine small business through greater access to capital, systems of mass production, and distribution.
- There will be a revaluation of local assets and companies in global perspectives as climate change and economic instability remain at the forefront.



OVERVIEW

Let's say you have an idea for a product. Maybe you know who you need to hire or join forces with. Maybe you have the capital and the right equipment, or maybe it's on another continent, or maybe it's right next door...

Plat-former is a universal networking platform that supports the creative industries by linking creators, clients, suppliers, objects, and technologies

at multiple scales to generate new ideas, employment, revenue, and access to resources.



A FRAMEWORK FOR THE FUTURE

FACILITATION OF CONTRACT, TEAMWORK, PROJECTS, AND ACCESS TO RESOURCES

Plat-former targets the creative sector and those who employ and support them locally and globally. It helps them find work and collaborators.

INVENTORY OF CREATIVE PEOPLE AND OBJECTS

Plat-former is a system of exchange between people and devices. Platformer communicates ideas and physical, networked resources.

SYSTEM OF INFINITE INTERFACES AND CULTURES

Plat-former is a universal network for existing and future digital formats (e.g., digitized smells, immersive virtual spaces, brainwaves, multisensory experiences). Plat-former facilitates sharing across cultures that goes beyond language, text, and image for global communication.

ALTERNATIVE FORMS OF EXCHANGE

Plat-former manages payment and ensures that freelancers and small companies are paid on time. The system of "favours" formalizes systems of bartering and trade. The system of "leftovers" gives access to resources that would otherwise be wasted. Plat-former removes social barriers to sharing and puts private resources in the public realm.

BALANCE OF ONLINE AND IN-PERSON COMMUNICATION

Plat-former emphasizes direct communication by removing the middleman and facilitating new relationships. Locally, this means more face-to-face through meetups and encounters with service providers. Globally, this means using Platformer communication technologies and guidelines to negotiate etiquette, business, and manufacturing in foreign countries and languages.

SAFETY AND ACCOUNTABILITY

Plat-former works as a traceable system, making the sharing of devices safer. A rating system documents transactions with other users.

BENEFIT TO INDIVIDUALS AND CREATIVE COMMUNITIES

Through a system of social good, 1% of every project fee will go to the Platformer foundation. The fund would support the creative community or direct creative services to non-profit activities and organizations.

PLAT-FORMER PROFILE

CROWDFUNDING

support freelance art test the market

MEET CLIENTS

looking for collaboration for specific projects

EXPANDED NETWORK

take part in MULTIDISCIPLINARY TEAMS



SECURED COPYRIGHTS

policies of payment



SHARE TECHNOLOGY

you have and look for the one you need

GET STUFF MADE

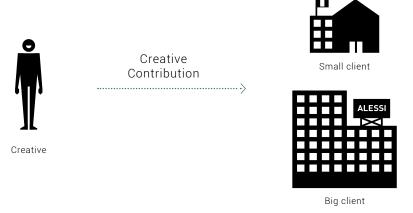
locally and globally

FAVOUR SYSTEM

send

PERCEPTIBLE WORKS

LINES OF COMMUNICATION





Big client









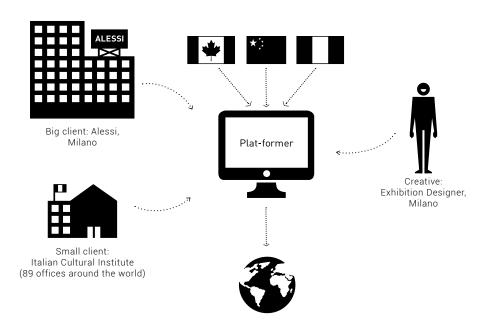


A CASE STUDY

Plat-former aims to create lines of communication between creatives and their clients—both big and small. In this case, Big Client Alessi is interested in creating an international traveling exhibition called "Design Factory," which hopes to mass-produce Italian culture and design for global consumption. This scale of exhibition is outside of Alessi's normal operations and the company needs to temporarily hire a team of creatives to help develop and

manage this project. The team will grow and get smaller at various phases. It is important that the team is sensitive to local cultures. In order to reduce shipping costs and show the exhibition at the same time in multiple places, they decide to produce the exhibitions locally rather than ship one exhibition from country to country. Alessi has a strong Italian network, but needs to find reliable creatives around the world who will work with their team in Milan.

CASE STUDY: ALESSI



"I won't compare ants and people, but ants give us a useful model of how single members of a community can become so organized that they end up resembling, in effect, one big collective brain. Our own exploding population and communication technology are leading us that way." 18

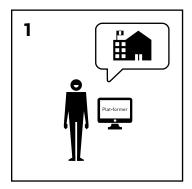
LEWIS THOMAS

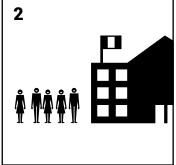
A CASE STUDY

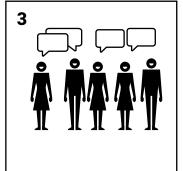
THE LAUNCH

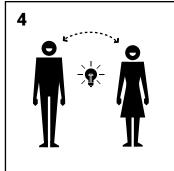
- 1. Plat-former launches in Milan. A medium-sized design firm offers to host the first meetup and Plat-former provides the inaugural event in the city.
- 2. Creatives and clients in Milan will continue to host meetups on their own for networking and learning about community resources that could be shared.
- **3.** Guests learn about equipment and facilities that the new design firm owns that could be shared.
- 4. A member of Alessi's marketing team meets potential new hires as well as a representative from the Italian Cultural Institute looking for creatives to send to a digital media festival in Toronto. They discuss a new exhibition Alessi is planning called the "Design Factory," which will showcase Italian culture, design, and mass production for global consumption.

THE LAUNCH









A CASE STUDY

TEAM BUILDING AND CREATIVE/ CLIENT COMMUNICATION

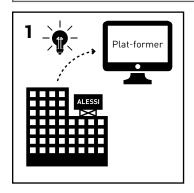
Alessi, having returned from the Plat-former launch, determines that it should test the system for the "Design Factory" project.

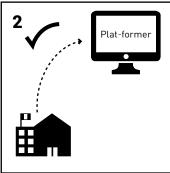
- 1. Alessi posts the project on Platformer and creates a profile that includes information on its internal team. A system of referrals, ratings, and testimonials helps build trust between clients and creatives.
- 2. The Italian Cultural Institute also joins
 Plat-former and starts spreading
 the word to their global contacts.
 Museums express interest in

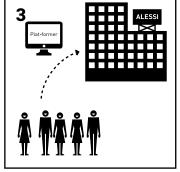
hosting the exhibition based on their schedules and space.

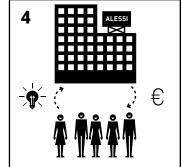
- 3. Designers in Milan apply to the project and tell their friends in other countries. Plat-former suggests teams based on interpersonal skills as well as information about which freelancers have worked well together in the past. Alessi quickly assembles teams in Milan and five other cities.
- **4.** Plat-former is used to determine the scope and schedule of deliverables. Alessi then pays team members through Plat-former when the deliverables are completed, ensuring that contract workers and small companies are paid on time.

TEAM BUILDING & CREATIVE/CLIENT COMMUNICATION









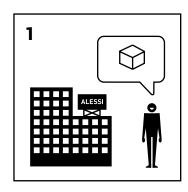
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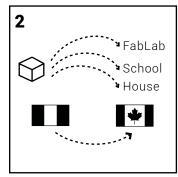
A CASE STUDY

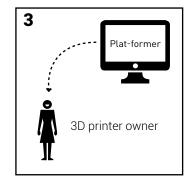
DESIGN & MAKING NETWORK

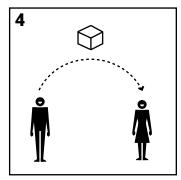
- **1.** Alessi prepares 3D files of the exhibition objects and sends them to print in each of the cities.
- 2. Through the distributed device network, the objects are created in several Fab labs, private residences, and schools, then paid through the Plat-former pay system, which has ensured that funds have been set aside.
- **3.** The objects for the Toronto exhibition are printed there and the team is notified when they're available for pick up.
- **4.** The objects are picked up at a local maker lab, which cements a connection between the two parties. Thanks to Plat-former, the Toronto team has made new local connections and used technologies they didn't have access to before.

DESIGN & MAKING NETWORK









A CASE STUDY

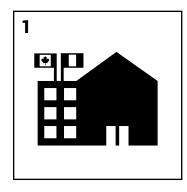
THE ITALIAN CULTURE INSTITUTE

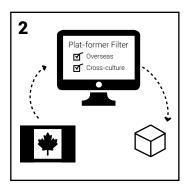
- 1. The Italian Cultural Institute is successful in obtaining funding to help produce the exhibition, but there is still a gap. The Toronto team has big plans for a modular display system. It is not possible with the budget.
- 2. So they start browsing through Plat-former, entering the specifications through the manufacturer filter; the system identifies options based on

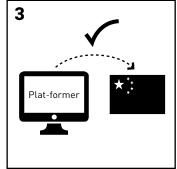
quantities and materials.

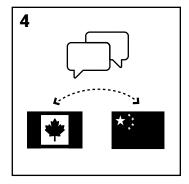
- **3.** After the connection has been made with China, the files are sent via Plat-former to a factory with a high user rating in Harbin, China. Plat-former provides a step-bystep guide to the manufacturing process.
- **4.** Simultaneous audio translation integrated with video and smart gloves clears up any confusion around the final product before it is made and shipped to Canada.

THE ITALIAN CULTURE INSTITUTE









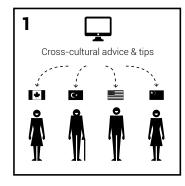
A CASE STUDY

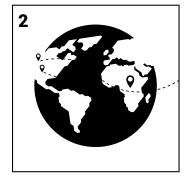
SCALING GLOBALLY

Based on the success of the Toronto exhibition, Alessi and the Italian Cultural Institute decide to reproduce the exhibition in multiple locations. They re-post the project on Platformer. Soon creatives around the world are making profiles so they can apply as well. Plat-former filters them by availability and salary expectation to ensure that they can work when Alessi needs them and within budget. Plat-former suggests teams based on interpersonal skills and

professional history. Alessi quickly assembles teams with expertise in graphic, exhibition, interaction design, and storytelling in ten other cities. Through Plat-former's communication spaces and tips on how to communicate and conduct business across cultures, Alessi and the Italian Cultural Institute host team-building workshops on and offline. These new connections lead to future collaborations—both locally and internationally—beyond the "Design Factory" exhibition.

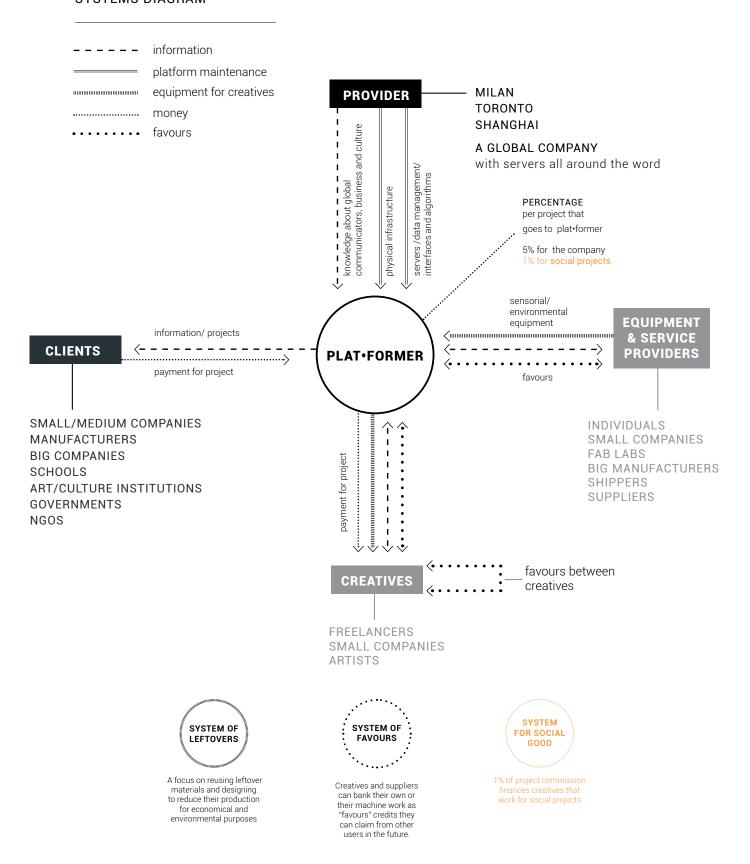
SCALING GLOBALLY







SYSTEMS DIAGRAM



BUSINESS PLAN

KEY PARTNERS	KEY ACTIVITIES	KEY RESOURCES
creatives clients payment providers	job & networking opportunities collaboration + team building sharing skills & equipment	technological interfaces creative skills people
cost structure employees financial fee offices servers	interface design team technology lab	projects
VALUE PROPOSITIONS	CUSTOMER RELATIONSHIPS	CUSTOMER SEGMENTS
meet new clients and collaborators guaranteed payment	automated service physical interactions	FREELANCERS SMALL COMPANIES ARTISTS
contacts & visibility	virtual market and workplace	INDIVIDUALS SMALL COMPANIES FAB LABS
easy access to collaborators and short-term hires	CHANNELS word of mouth events	BIG MANUFACTURERS SHIPPERS SUPPLIERS
quality and trust through testimonials and peer ratings algorithms match work skills, soft	technological promotional interfaces material	COMPANIES MANUFACTURERS SCHOOLS
skills and personalities global communication guidelines	percentage of project fees	INSTITUTIONS GOVERNMENTS NGOS

CONCLUSION

Plat-former represents a desire for more meaningful communication between people and between people and technologies.

It may be impossible to create a universal, one-size-fits-all platform that successfully navigates languages, technologies, and cultures. This project certainly risks adding another social network module to an already crowded market, where users often complain of communication burnout and the inability to 'turn off.' At the same time, this project has the capacity to bring together the strengths of social media and the Internet of Things. What new models of local and global collaboration and distributed production could result? Plat-former recognizes our continued reliance on face-to-face communication and relationships unmediated by online networks. With more time, this project could explore what it means for smart people and smart objects to truly interact.

Plat-former fits the ideology of the Sharing Economy by making unused, privately owned resources more available, and by formalizing unofficial bartering systems within creative industries. However, the desire to monetize and render everything productive all of the time may limit creativity, spontaneity, and necessary downtime. In order to connect personal smart objects with global networks and facilitate payment for services, Plat-former must overcome barriers of privacy, security, and trade.

This project is based on the hope that creative industries will grow over the next ten years. It is exciting to think that designers and artists around the world might find new clients and ways to work together with access to new communication technologies and modes of production. How does Plat-former help prevent the exploitation and the undervaluing of creative work while connecting big business to small service providers? Moreover, how does it make offshore manufacturing and outsourcing intellectual property easier? By linking creative industries around the world, could Plat-former enable a stronger collective voice, one that demands fair pay, benefits, and regulations in support of cultural production?

IN THE FUTURE, WE WILL
PROVIDE CREATIVES WITH
MEANS OF COLLABORATION THAT
ELIMINATE THE SPATIAL BARRIERS
THAT SEPARATE THE BEST
TEAMMATES FROM EACH OTHER.



THE COMMUNICATION TEAM:

Elise Hodson

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School of Architecture and Society, Politecnico di Milano

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ANDREA REBAGLIO
Art and Culture
Vice-Director at
Fondazione Cariplo



ALESSANDRO RUBINIProgramme Officer, Progetto IC-Innovazione Culturale,
Progetto Distretti Culturali

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"MUSEUMS, LIKE MOST SPHERES OF OUR LIVES, ARE NOW UNQUESTIONABLY DIGITAL."

PAOLA ANTONELLI

SENIOR CURATOR OF ARCHITECTURE AND DESIGN, AND DIRECTOR OF RESEARCH AND DEVELOPMENT, MOMA

• The role of the designer is to imagine possible futures and to consider how the demolition of the past can be avoided in the process of creating new futures.

Paola Antonelli, Director of
Research and Development of the
MoMA, assured that the future
of museums and curation is not
threatened by digital technology; on
the contrary, Antonelli claims that
digital technology has revitalized
the importance and possibilities
of the museum experience. She

presented to the audience a virtual museum, developed with the MoMA, to highlight the innovative art of Muslim women around the world. While the large amount of content makes curation challenging, it is even more important today, Antonelli said, to preserve the past.



"WE CANNOT JUST CRITICIZE FINANCIAL CAPITALS; WE ALSO NEED TO PROBE ALTERNATIVES. ALTERNATIVE ECONOMIES NEED ALTERNATIVE CURRENCIES."

PATRICIA DE VRIES

PROJECT COORDINATOR AND RESEARCHER AT THE INSTITUTE OF NETWORK CULTURES

 Economic crisis, the growth of digital currency, and values for cryptocurrency.

Patricia de Vries, MoneyLab Project Coordinator, presented the research of the MoneyLab, a project focused on the study of the future of currencies. Patricia and the MoneyLab set out to understand whether the emergence of cryptocurrencies, such as Bitcoin, represent the future of money.

The answer, Patricia explained, is complicated. Cryptocurrencies offer us an alternative, not a replacement.



ENERGY AND ECONOMY



Traditional labour is being replaced by automated systems and smart infrastructure. Many cities are shifting from manufacturing to creative economies, changing the future of their labour forces. We must investigate how products, systems, and services can help us be happier, more creative, and more productive in our pursuits.



OVERVIEW

Creativity, not capital or technology, is the source of change today.

Creative industries are becoming increasingly important components of modern post-industrial knowledge-based economies. Not only do creative industries account for above average economic growth, they also help create new forms of collaboration, new creative structures, and new alliances. At the heart of this is a new autonomous work culture.

The following is an attempt to gain a better understanding of the creative energies associated with an autonomous economy. Our team proposes to create systems that support these independent contractors and leverage the creative capital offered in a new autonomous work culture.



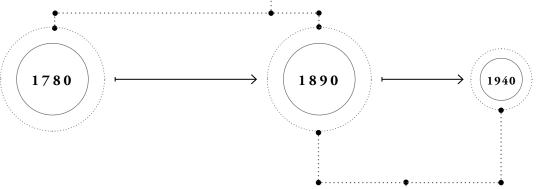
TIMELINE

Innovation and creation have had a massive impact on the evolution of modern industry. The timeline below illustrates how pivotal moments of innovation have changed our global economies and revolutionized the way we work.

• INDUSTRIAL REVOLUTION 1780-1890

Second half of the 18th century - the first half of the 19th century

The Industrial Revolution shaped the way that we live and work. Factories and the need for workers dramatically changed labour patterns and population distribution, causing urban spaces to appear across the globe. Along with this urban development, big business develops as well.



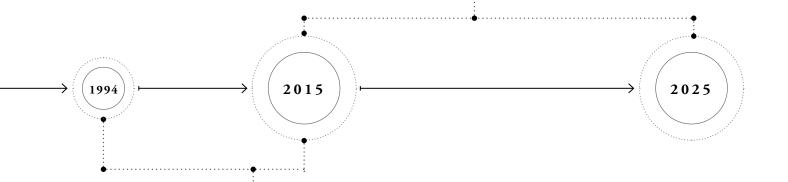
• FORDISM 1920'S

The introduction of assembly lines allows semiskilled workers to contribute to finished products. Economic and individual wealth grows through a system of mass production and consumption, resulting in standardized wages and the creation of the middle class. Progressively fewer things are made in the home. Workers are paid living wages, so they can afford to purchase the products that they make.



• AUTONOMOUS ECONOMY 2015 - 2025+

Jobs within the creative sector have become autonomous. Small businesses, startups, and freelance designers are operating independently and away from traditional corporate structures. This is a result of the transformational effects of information and communications-based computing technologies.





DIGITAL ECONOMY 1994 - PRESENT

This new economy is based on digital computing technologies. Work and information are conducted over shared networks, thereby decentralizing human intellectual resources and expanding our ability to think globally as we work.

ENERGY AND ECONOMY CHALLENGES TODAY

Small businesses, startups and freelance designers are increasingly operating independently and away from the corporate structure. Increasingly, this has become part of the norm rather than the exception.

However, this new class of independent creatives does face challenges. Without the support of corporate contracts or funding and connections to a supply chain, it is difficult for creatives to execute projects. With little resources of their own, creating sustaining revenue streams to survive over the long term or being able to exert influence on larger scale projects leaves them vulnerable to exploitation and marginalization.

A support system is needed to leverage this creative energy and

allow it to have a greater impact in our society. Some of the main questions regarding independent creatives over the next ten years will be:

- Will automation free workers for more intellectual activities or further marginalize them?
- Is there a more efficient way to work and use creative energy than the current system?
- How can we explore multicultural creativity in collaborative projects?
- How can networks create support infrastructure for creative autonomous workers?
- What is the best way to facilitate collaboration among diverse creatives?
- Can a platform stimulate social and creative energy?

A FRAMEWORK FOR THE FUTURE

HOW

- Collaborative
- Efficient tasking
- Diversity leads to innovation
- Multicultural and multidisciplinary
- Remote collaboration
- Information sharing
- Big data

WHO

- Autonomous/freelance
- Robots produce, people create
- Millennials (born between 1982 and 2002) as workforce
- People living longer
- Larger presence of women
- New creative professionals

WHAT

- Increase of intellectual energy by decreasing the use of physical energy
- Creative economy
- Socially and culturally inclusive
- Customization of goods, services and jobs
- Entrepreneurship opportunities

WHERE

- Offices disappearing
- Fast mobility
- Work where you want to live
- Blurred borders

WHY

- Cultural identity crisis
- Work becomes an extension of identity
- Shift to work on what you believe in (rather than most lucrative salary)
- Stability is not an issue in a distributed economy
- Work is what you do, not a place you go to

WHEN

- People who work less have more leisure time
- Time is flexible
- Technology makes team work more efficient
- Manage energy (both intellectual and conventional) to use when you need it

CREATIVE SYNERGY

OVERVIEW

Introducing Creative Synergy, a digital platform that allows individuals to come together to form a cooperatively owned creative consortium.

By creating a digital supply chain platform with collaboration tools, we can support the autonomous worker by leveraging collaboration and increasing creative energy to allow for a more sustainable and effective work environment.

The Creative Synergy platform manages projects and connects creatives, selected through their disciplines and interests, to work together in an efficient and collaborative way. This means that autonomous workers can use the different levels of the system in their

projects, spanning from research to execution, interacting with real time feedback and data in all phases of the process. The platform will be designed to be open to include new actors at any time.

This platform provides supports both at the local and global level, as well as across multicultural and multidisciplinary creative boundaries. In this way, the autonomous creative workers and their energy flow can boost business and economies toward a more sustainable and inclusive future.



CREATIVE SYNERGY

SYSTEM DESCRIPTION

The Creative Synergies platform collects profile information from autonomous creatives as well as small startups. This information is used to identify compatibilities among its actors to generate the most useful consortium for a specific project.

This allows independently operating designers to group together to maximize their creative energy and have a greater impact. After creating a Working Group to fulfill a particular task, the platform will assist the group in every phase of the project from Analysis to Strategy and through to Execution, acting as a neutral management and advisory system.

During the Analysis phase, the Platform will assist the Working Group by providing research materials gleaned from the use of individual knowledge and network know-how.

The Strategy phase of the Platform supports the development of the project through the distribution of intellectual energy, working to figure out the most efficient use of time,

money (profit), and creative inputs.

Finally, in the Execution phase, the development of the project is tracked by the Platform in the organization of daily tasks, remaining compliant with the terms set by the Strategy phase. The platform is also intuitive, collecting and monitoring data and reacting to unforeseen changes in the environmental, social, and economic landscape. It can react to supply and demand fluctuations or respond to relevant innovations. The flow of information from individuals and companies, promotes a collective and cooperative economy, generating a greater creative energy.

The platform is governed by the principles of stakeholder democracy, which is a socioeconomic philosophy that proposes shifting decision-making power from corporate managers and shareholders to a larger group of public stakeholders that includes workers, customers, suppliers, neighbours, and the broader public.

PROCESS FLOW

PHASE	AIM	CRITERIA
ANALYSIS	Research and innovate	Individual knowledge and network know-how
STRATEGY	Elaborate	Energy distribution, time, profit
EXECUTION	Develop	Organization and rapid reaction to unforeseen change

The flow of information through the Platform, from individuals and companies, promotes a collective and cooperative economy, generating creative synergies.

CREATIVE SYNERGY

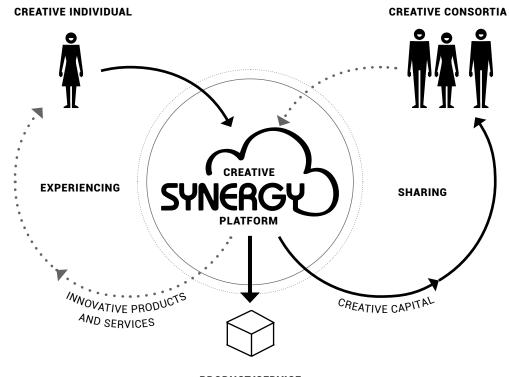
THE PLATFORM AT WORK

The Platform is a way for individual creatives to share their skills with other creatives, and in turn benefit from the superior product they can produce when working together.

The Platform offers a supply chain collaboration and management tool combined with a knowledge management system that can aggregate teams and foster their collaboration on a project-by-project

basis. The platform is underpinned by an agreed-upon set of working practices by which the creatives share and abide. This allows for the ethical conduct of the members and also sets standards of best practice and continuous learning for the working groups. The premise is that creatives reach greater heights of achievement when they can use technology to collaborate more effectively with each other.

SYSTEMS DIAGRAM



PRODUCT/SERVICE



CREATIVE SYNERGY

A CASE STUDY

TIKIM (1) has designed a new fashion collection and the system suggests and identifies collaboration partners for manufacturing, distribution and sales based on four characteristics: budget range, proximity, experience and availability. The intention is to ensure his ideas reach the market through the most appropriate supply chain.

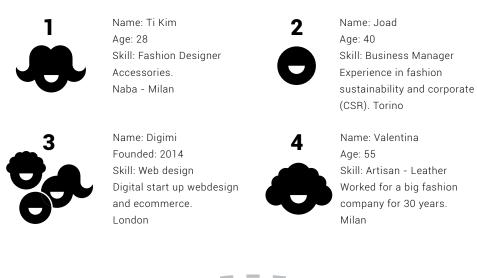
JOAD (2), an expert in business design, has been recommended for Tikim to create the business model and go-to-market strategy. He has worked on a number of projects for successful designers and understands the Middle Eastern and Asian target markets.

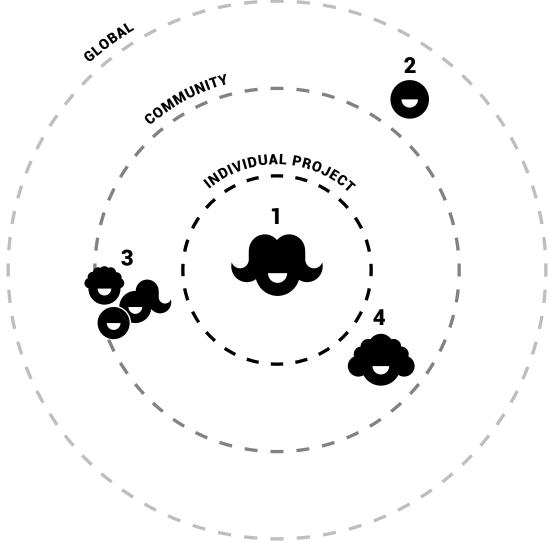
DIGIMI (3) a digital e-commerce wizard, has been contracted to design the website and the e-commerce platform due to the affordability

of its service offering; and finally, **VALENTINA (4)**, a small-scale quality manufacturer, has been selected to locate and provide the leather parts for the accessories/bags.

The system creates the project structure and its deadlines and monitors and tracks the partners' delivery progress. When the system detects a problem (for example, the demand for bag accessories increases significantly), it suggests a solution for a new artisan partner that can help increase production and then updates the project data in real time.

True collaboration demands the interaction or cooperation of two or more organizations or individual agents to produce a combined effect greater than the sum of their separate effects.





CONCLUSION

By integrating technology and responsive data into the ways they work, creatives of the future have the ability to leave time-consuming administration and project management tasks to the Creative Synergy platform, thereby freeing up more time to invest in the work itself.

The platform also enables creatives to assemble teams based on the compatibility of their skills, rather than relying on traditional corporate structures to connect them with partners. Between the time saved by leaving administrative tasks

to technology and quality of work gained by assembling skillsoptimized teams, creatives of the future will be free to produce even better work, while simultaneously enjoying the conveniences of a more efficient process.

CREATIVE SYNERGY

THE FUTURE OF EMPLOYMENT
INVOLVES ADOPTING PRINCIPLES
OF STAKEHOLDER DEMOCRACY
TO ORGANIZE AND MANAGE
GLOBAL COLLABORATIVE
CREATIVE TEAMS FOCUSED ON
INCREASING INTELLECTUAL
ENERGY AND DECREASING
ENERGY EXPENDITURES.



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MARIA CRISTINA PAPETTI Head of Sustainability Projects and Practice Sharing, Enel S.p.A.



MARINO MASOTTIFinancial journalist at
Websim



CARLOTTA DE BEVILACQUA Artemide Vice President

"ARCHITECTURE IS THE INTERFACE BETWEEN US AND THE OUTSIDE. HISTORICALLY, THIS INTERFACE WAS PHYSICAL. TODAY THE INTERFACE IS NOT ONLY PHYSICAL, BUT ALSO DIGITAL AND BIOLOGICAL."

CARLO RATTI

ARCHITECT & DIRECTOR OF MIT SENSEABLE CITY LAB

• In a post-city world, traditional notions of physical spaces and citizenship must be redefined.

Carlo Ratti, director of the MIT
Senseable City Lab, proposed a
future for cities where the physical
and the digital converge. Ratti
showed some of the projects he
and the MIT Senseable City Lab
have worked on, such as the Future
Food Pavilion for the World Expo
in Milan. Shoppers in the pavilion

could hold up a piece of food and the screen above them would display the manufacturing history and nutritional content of that food. By integrating digital technology into our physical spaces, Ratti stressed, we open up spaces with the possibility for new and exciting dynamic interactions.



"EXPERIENCE DESIGN WILL BE SOMETHING YOU DON'T WITNESS."

FOITENI AGRAFIOTI

CHIEF INNOVATION OFFICER AT ARCHITECH

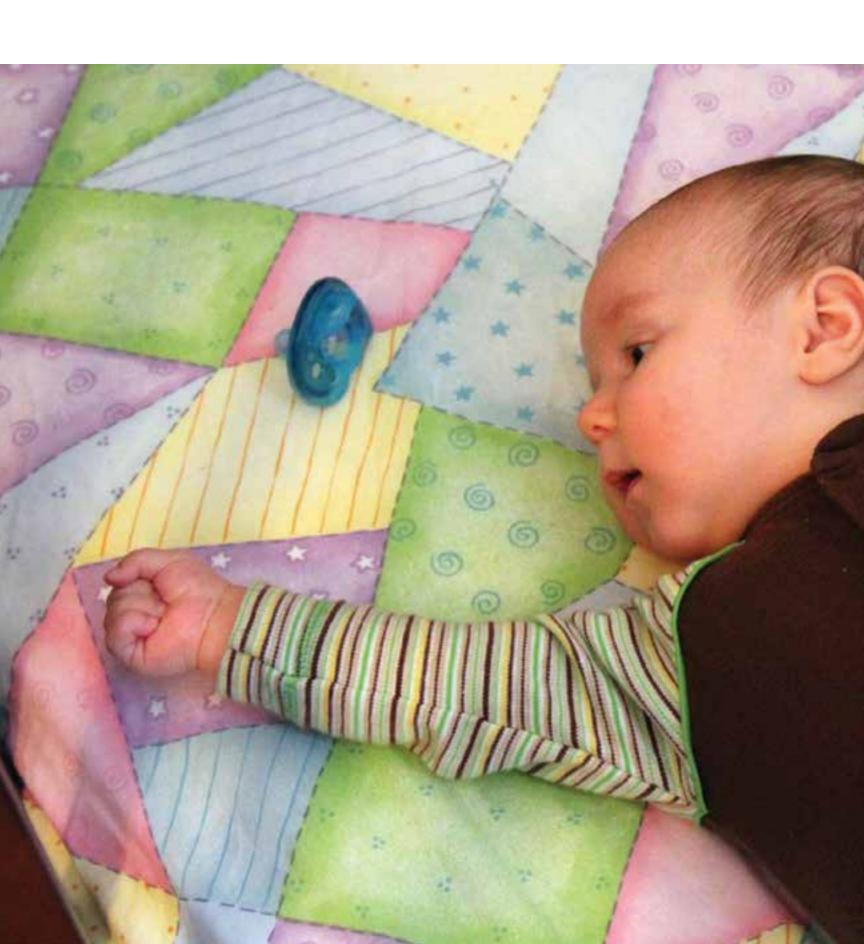
 Imagine a world where technology can perceive our state of mind and understand how we feel.

Foteini Agrafioti, Chief Innovation
Officer at Architech, asked the
audience to imagine a world
where computers understand our
feelings. She showed her previous
work on the subject: a device that

can authenticate the user based on their unique heartbeat. Agrafioti sketched out a responsive world based on technology that recognizes human emotion.



HEALTH AND WELLNESS



Designers are essential in the creation of a resilient and inclusive health and wellness system for all. This new system should implement social technology, utilize the vast data collection available and have a positive influence on our collective wellness in order to extend health care service to all global citizens.



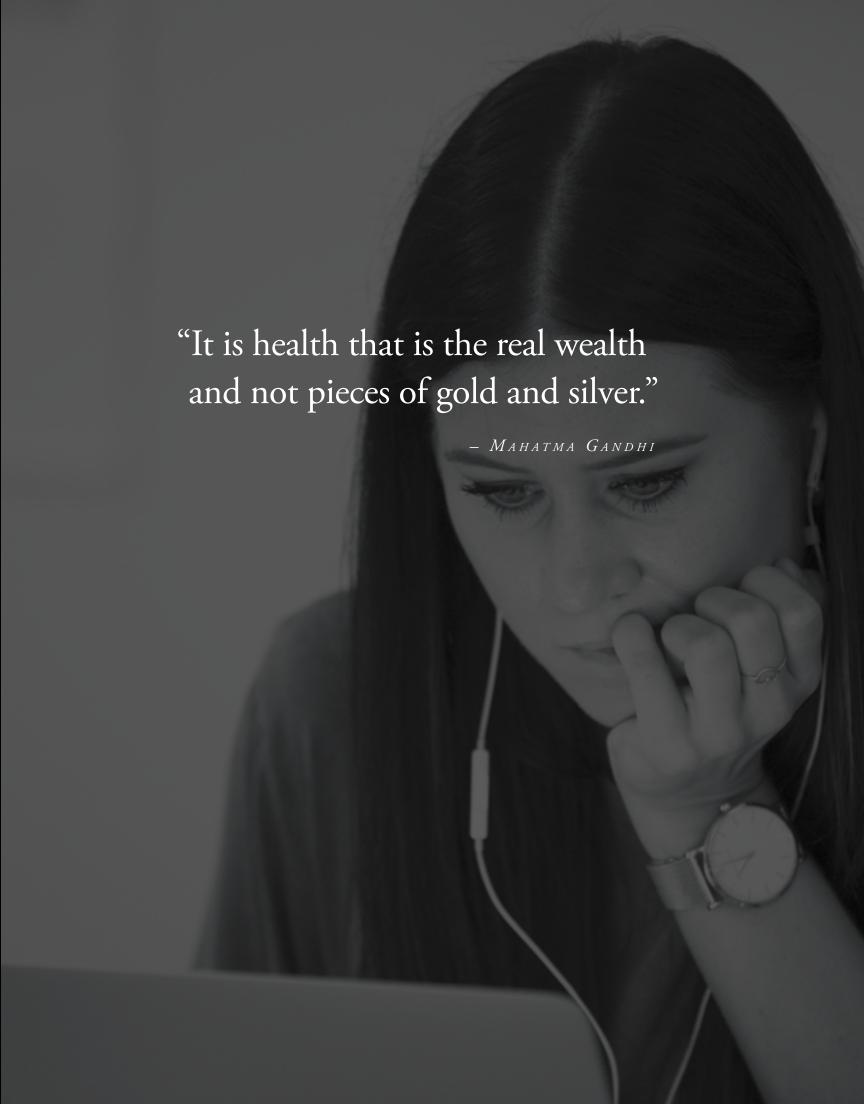
OVERVIEW

Cloud Health is an integrated health care system that connects the existing public health care services and programs and the private production of health and wellness products with a new peerto-peer assurance model that rewards participants who maintain a health and wellness-driven lifestyle.

The assurance model is focused on user-centred needs and takes advantage of the collection of lifestyle, health and wellness, and patient data to develop a cloud-managed interface for health service.

Cloud Health is a lifelong and worldwide opt-in service that works to improve wellness, provides education for prevention, and coordinates care in a holistic manner for body, mind, and spirit. Cloud Health can collect, analyze, and push health and wellness information, assist with food nutrition management, provide reminders on activity levels, tips on balancing mental health, instructions on the management of any chronic or new illness, and suggestions for lifestyle adjustments and improvement.

According to the World Health Organization (WHO), Italy holds the prestigious position of having a health care system that is second only to France. If we envision a complementary system to the current Italian health care infrastructure-one that combines the power of cloud computing, which collects biometric data and delivers peer-to-peer services to give control of health and wellness to the individual—a new paradigm for a super system can be imagined. A synergy of health education, wellness instructions, and data collection can be rolled out from childbirth to end of life as a "membership" in a connected health and wellness cloud of services that is not bounded by national borders.

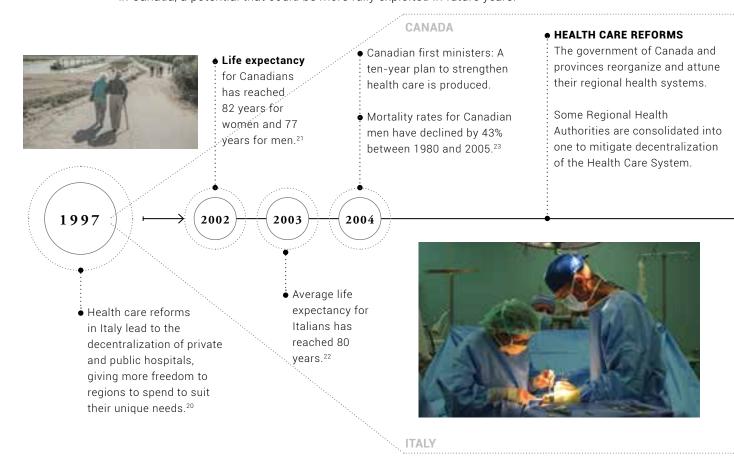


TIMELINE

There have been many changes in how we care for one another, both in Canada and in Italy. In Canada, public and private coverage for health services is highly segmented. Universal, first-dollar coverage is restricted to medically necessary hospital and physician services.

In 2013, according to the World Health Organization, literacy is a better predictor of an individual's health status than income, employment status, education level, or ethnicity.

Major shifts in policy are often easier to achieve in states with centralized systems, but decentralized systems may offer more opportunities for experimentation, as well as a rich environment for evaluating natural experiments. This is the potential offered by the provincial health systems in Canada, a potential that could be more fully exploited in future years.







- COSTS AND INFLUENCE
 Health literacy is a strong
 predictor of health status.
- The Government of Canada no longer requires citizens to fill out the long-form census or its additional health questions.²⁶

2011

- \$200 billion was spent on Canadian health care.
 Almost half of this was channeled toward hospitals and physician services.²⁷
- Canada spends i 10.9% of the GDP i on healthcare.²⁸
- for Canadians has reached 84 years for women and 80 years for men.30
- Approximately
 60% of Canadians
 are not health
 literate.32



health has risen

1990 to 8.7%.²⁴

from 7.9% in

2007

• According to WHO, Italy holds the prestigious position of having a health care system that is second only to France.²⁵

2010

2009

- Health care reforms in Italy started in 1997 with the decentralization of the system; private & public hospitals now compete for clients.
- Italy spends 9.1% of the GDP on healthcare.²⁹

2013

for Italians has reached 85 years for women and 80 years for men.³¹

2015

HEALTH AND WELLNESS CHALLENGES AND OPPORTUNITIES TODAY

1. HEALTH AND WELLNESS SYNERGIES SAVE HEALTHCARE COSTS:

- Wellness is a contributing factor to the healthiness of individuals.
- ROI returns on productivity, reduced absenteeism and profit: corporate leaders estimate that every \$1 spent on wellness is a \$3 reduction in medical expenses.³³
- The wellness cluster is a \$1.9 trillion a year business in the US.³⁴
- The American Medical Association revealed that 25% of all health care costs are due to preventable behavior and voluntary health risks.³⁵

2. SOCIAL TECHNOLOGY FOR HEALTH AND WELLNESS:

- Global network of health care providers with shared-knowledge economies
- Augmented training of all professions that intersect with

- health and wellness
- Pattern of effective treatments that takes variables, such as geography, characteristics, culture, et cetera, into consideration
- Blurring of health haves and have-nots
- Technology solutions help create local pop-up health and wellness centres that are connected to the Cloud Health network, making health care delivery more accessible

3. PARTICIPATORY-SHARED ECONOMY:

- Old age pension will be a comprehensive health-wellness assurance and pension plan
- All participants will be owners and users
- All public service providers will be supported
- All private sector partners will pay for access in order to finance the system

"Poverty and social exclusion, in all countries, increase the risk of MADOW developing a disease and dying... this is especially true of women and children, who are vulnerable TAPINESS. to the effects of social inequity and poverty and less able to access resources. The poor and people with less education are more likely to maintain risky behavior, have less access to quality care, medications and post care services." World Health Organization 2015

CLOUD HEALTH

OVERVIEW

The Cloud Health project is a synergy of health services, wellness products, education, and communities that is facilitated by technology and powered by peer-to-peer network organization.

The Cloud Health project supports public health care for individuals worldwide, for all health interventions that are required due to poor coverage, chronic illness, accidents, infirmities, diseases and old age. While the cost of health care in many developed nations is rising and the existing systems of products and services must be rationalized (Italy and Canada), there are many parts of the world without access to medical care.

The Cloud Health team believes that health and wellness is a human right; we must, therefore, create a public health care delivery system that is equitable and global, which can reduce and rationalize its costs. This requires a sound business model that serves everyone. Cloud Health also proposes that private profit-driven health sector companies would have to pay to access the system's large collection of health data, which would be used to verify that their innovations,

medications, services, technologies, programs and more under a new health and wellness charter are used to strengthen its public service mandate.

Like the World Health Organization statement, which believes that "health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity," Cloud Health proposes that all participants maintain a balanced life. In order to do so, all participants must be able to obtain services in a holistic manner for body, mind, and spirit.36 The Cloud Health team believes that it will motivate people to acquire healthy habits through a combination of community peer pressure, the promise of self-improvement and empowerment, well-researched information ("Dr. Google," social media, and information clubs), and financial rewards (interest, investment, and retirement savings).



- World Health Organization

CLOUD HEALTH

PRECEDENTS

Technological innovation and globalization of services have greatly transformed communications and information services that are affecting the provision of health and wellness services in the developed world. However, the widening gap of services between industrialized and developing countries, as well as the collapse of family and peripheral services for poor communities, make these advances only available to the few. This gap is also evident between poor Canadian communities and large metropolises where the gap of available local services is always at risk of being terminated and some have been centralized in mega-facilities operating at a regional level.

Industrialized countries have a vested interest in the health and wellness of their less fortunate neighbours. After all, diseases do not respect political boundaries. We are all at risk if the human

population does not have equal primary high-level health care as well as access to wellness education and services

The following are key precedents, trends, and emerging innovations that can help realize the vision proposed by Cloud Health:

Peer2Peer Online Communities,

including financial investments and global health consortiums that both lend or invest across national boundaries and outside the institutional restrictions of banks.

These include:

- Peer2Peer Finance Association
- Peer2Peer Health Care Research:
 Pew Research Centre USA

Mentor Networks & Social Media

communities of interest are disseminating health and wellness information and education, and extending community-level support, at the regional, city, and business level to promote and increase health and wellness. These include:

- Peer2Peer patients: Smart Patients, online community
- Collaborative Chronic Care Network: C3N Project
- Mentoring, coaching, and face to face employees' health: Healics Inc
- Face to Face Mentoring: Ten
 Thousand Coffees Mentor Network

Physical computing wearable devices are being developed for tasks, such as coaching in sport, sleep controls, and nutrition. The technological innovations for the "Quantification of Self" present boundless opportunities, including DIY monitoring of various bodily functions and the ability to "shadow" behavior to monitor wellness. These examples include:

- Wearable baby monitor: Mimo Baby Rest Devices prevention of SIDS
- Augmented reality: Google Glass used for mindfulness exercises
- Performance diagnostics: Nike Fuel Band measuring physical activity

 Virtual reality: Haptic and remote surgery technology for simulated training

Data Collection and Analysis uses cloud infrastructure that collects ubiquitous data through a shared pool of computing resources. The data can then be retrieved and analyzed by third-party authorized service providers to both push information and analysis and pull patterns to be used for studies.

These include the following:

- Online medical resources based on community health data: Palo Alto Medical Foundation, Sutter Health
- Data Analysis Output: RAND Corporation
- Traumatic brain injury: Research and development of new treatments to prevent posttraumatic epilepsy
- People's Cloud of Things protecting privacy: Doc Searls, journalist and director of ProjectVRM at Harvard's Berkman Center for Internet and Society

CLOUD HEALTH

SYSTEM BENEFITS

A lifelong and worldwide Assurance licence will be provided at birth that will be staged and graduated along the entire life of the individual. The Assurance licence will integrate maternal care, birth, childhood development, education, work, travel, leisure time, and eventually retirement, and elderly care. Participants will be signed into the system before birth (but may opt out at 18 years of age) and will accrue financial investment for their lifestyle management that they will be able to withdraw for benefits at retirement.

The Cloud Health peer-to-peer organization will provide social and cultural benefits:

- Peer-to-peer community for information and prevention
- Control of health and wellness, including care management
- Mentor system for health and wellness

The Cloud Health services data collected from birth to death of large populations will provide research and development benefits and advanced medical ethnography

- Health-delivery service and program costs will be reduced and rationalized
- Information will be provided on cause and effect
- A peer-to-peer community will be created
- Health records will be integrated with life style records
- Data analysis will leap-frog research and development, pharmacological, and lifestyle studies
- Data analysis will demonstrate wellness patterns
- Good and bad health patterns will intersect with environmental and social context

The Cloud Health services data analysis results will provide social, cultural, and financial benefits, including:

- The reinvention and focus on health-delivery systems, research, and development
- The development of health and wellness education from birth
- The supply of health information on demand
- The synthesis of quantitative and qualitative data

Today, about 41 million people, mostly women and children, have active trachoma and need treatment. These people face the risk of visual impairment or blindness unless treated with a simple surgical procedure.³⁸

- International Trachoma Initiative (ITI) 2015



GIMBLE, FRED

00034356

Plan Contract Number

02310487

Member Certificate Number

1-800-555-9275

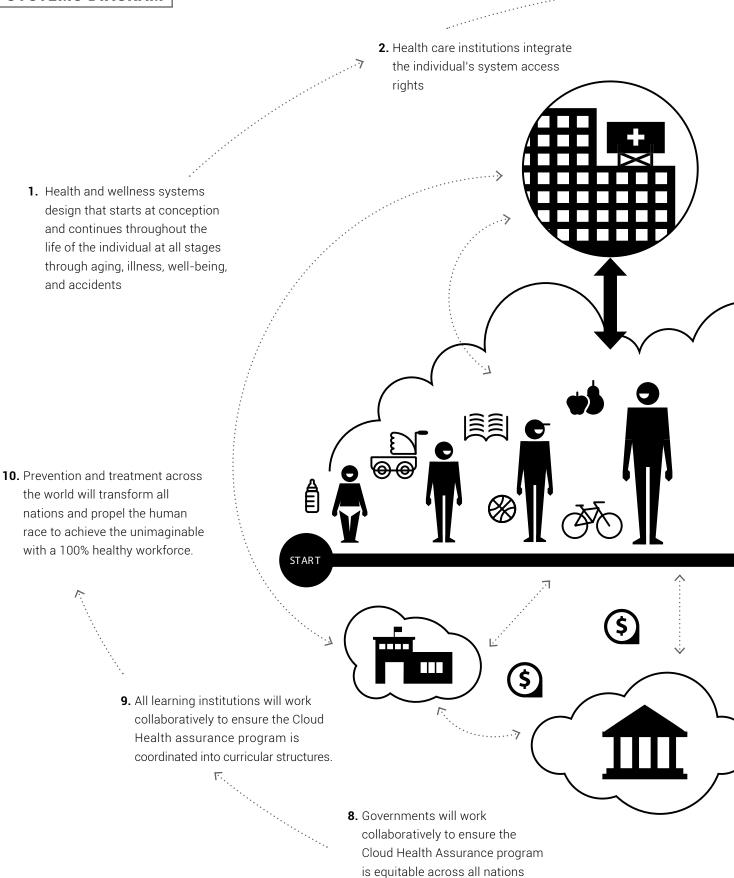
Info Health

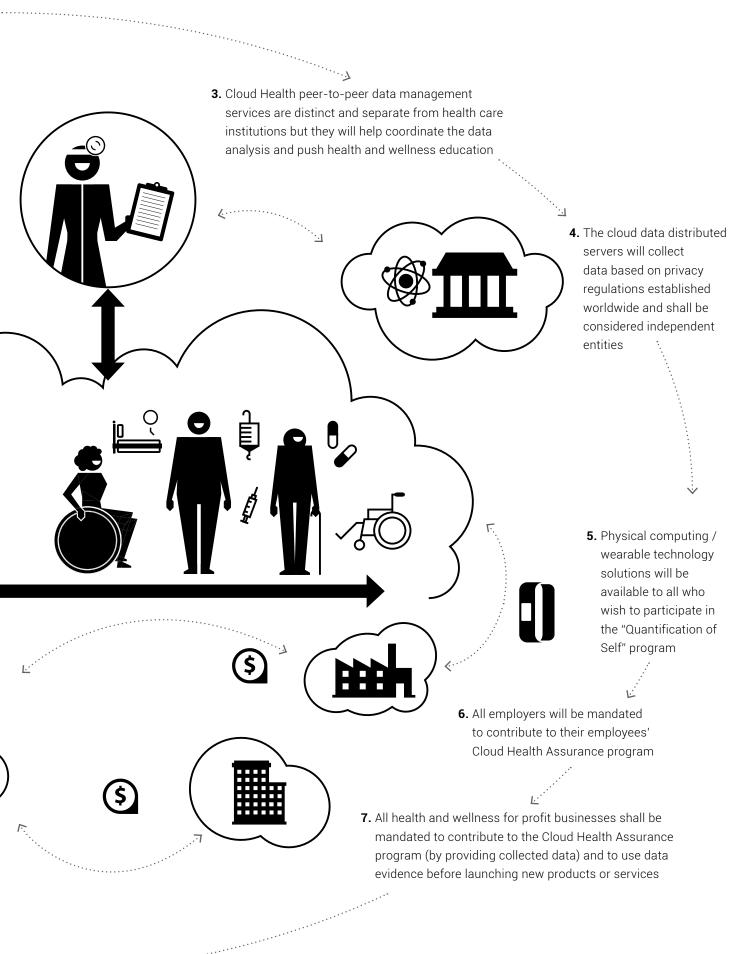


assorance

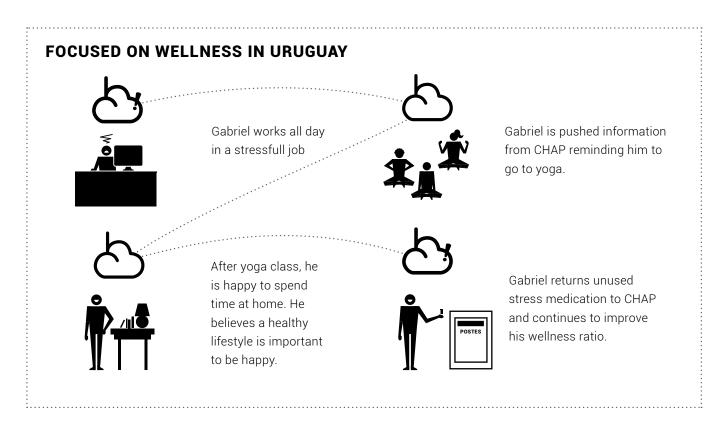
www.cloudhealth.coim

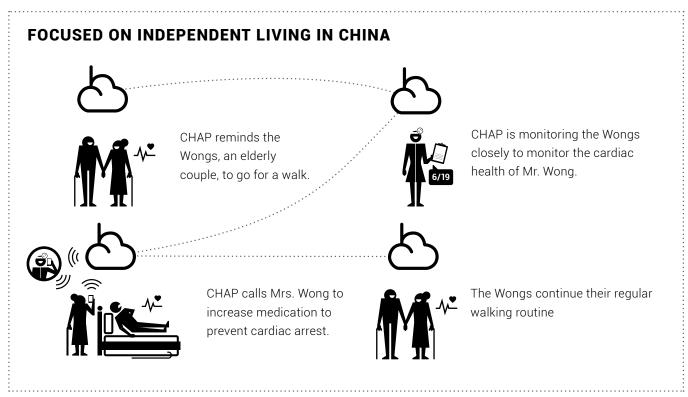
SYSTEMS DIAGRAM



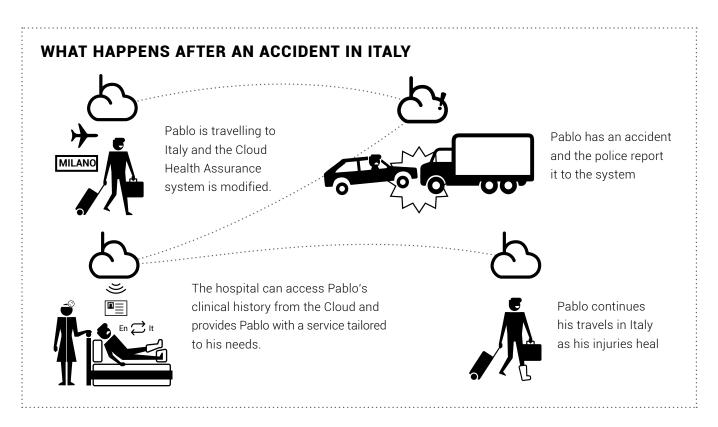


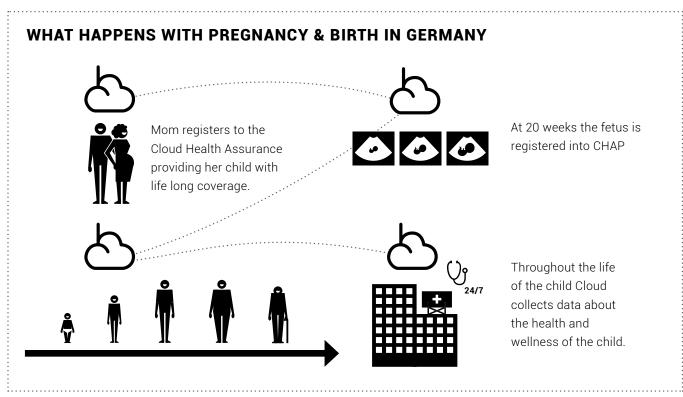
CASE STUDIES



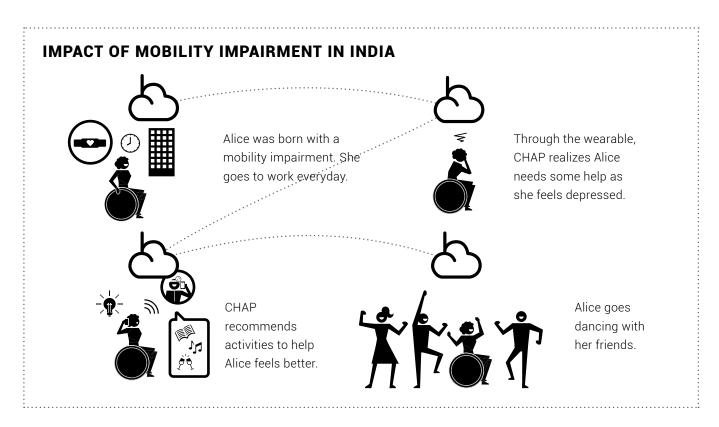


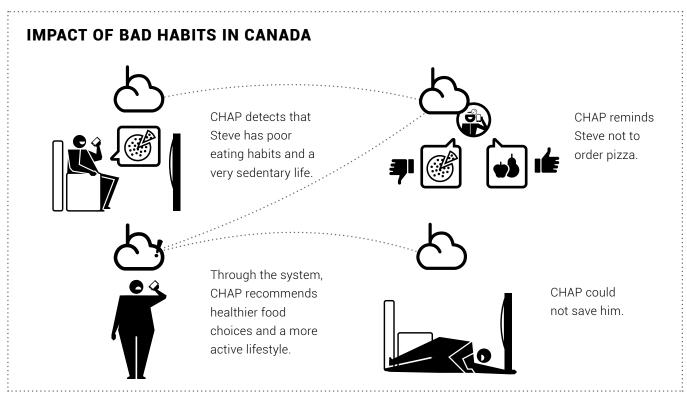
CASE STUDIES





CASE STUDIES

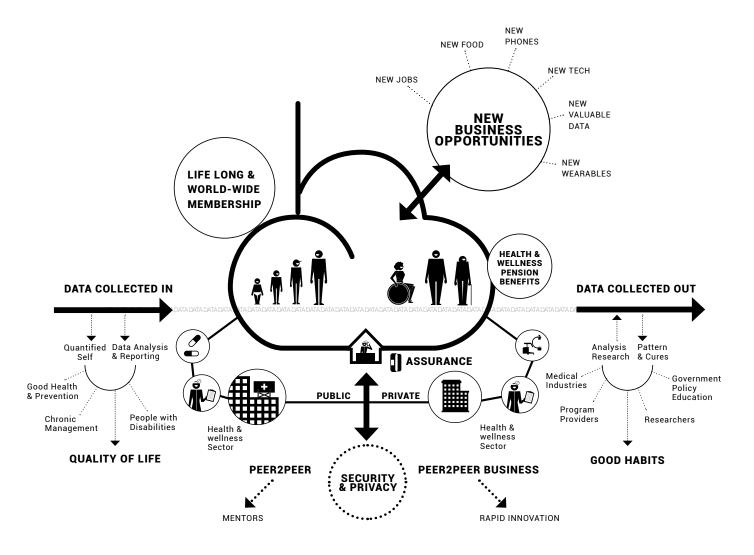




CLOUD HEALTH

BUSINESS PLAN

In order to provide an integrated health delivery system, the Cloud Health project combines the power of peer-to-peer financial organizations, large data cloud computing storage for the collection of quantified individual biometric data, the expertise of public service hospitals and specialized wellness centres, as well as a mentor network to analyze data and send information back to participants.



CLOUD HEALTH

HEALTH AND WELLNESS CHARTER 2015

This Charter of Health and Wellness Rights is essential to ensure health and wellness care is provided at a high standard of care. All best practices, treatments, discoveries, and patterns uncovered are shared with all global members of the system at no cost or penalty.

- 1. The promotion of and education in health and wellness is made a key focus of civil society from birth, and the responsibility of all schools, governments and businesses
- 2. Governmental commitments are made to dismantle border restrictions and comply with human rights that recognize people's right to have the highest possible standard of mental health and wellness
- 3. All participants shall support an inclusive system, including processes and programs that

- reflect and respect all ethnic groups, religious affiliations, and cultures
- 4. Personal biometric and health data will be owned and secured by individuals; governments will commit to creating laws that prohibit data collection without the explicit approval of the individual
- 5. All individuals must follow best practices for health and wellness to ensure lifelong well-being, regardless of their condition, location, circumstances, income, or age,

- in order to collect their health and wellness retirement funds
- 6. The Cloud Health data shall be designed and operated with individual security features that permit graduated levels of access as directed by the individual
- 7. All Health and Wellness delivery systems will be public and accessible to all; all public institutions supported by public funds
- 8. All private Health and wellness institutions will pay to access Cloud Health data; otherwise, they shall be prohibited from providing health and wellness services for profit
- 9. All Health and wellness treatments, diagnostics,

- pharmaceuticals, practices, and innovations will use large data demonstrations for effectiveness and authenticity.
- All food, personal care products, fabric producers, manufacturers, and retailers shall fully disclose their materials and ingredients for health and wellness ratings.
- 11. All places of learning, work, worship, public and private recreation, and commerce shall provide a wellness space that adheres to the Wellness Space Standards.
- 12. All employers shall make financial contributions to the Cloud Health Assurance program for health and wellness retirement funds.

CONCLUSION

It is a human right to access lifelong health care and to engage in wellness programs from birth to death. The Cloud Health Assurance program structured within a peer-to-peer business model can deliver such a system worldwide, for all people.

People will be engaged, supported, and empowered while receiving economic benefit at retirement age from their own successful health and wellness management. We predict that health data collection, which continues to grow exponentially, should be controlled and secured by the system participants who generate the data to support Cloud Health.

CLOUD HEALTH

WE MUST OPTIMIZE HOW WE CARE FOR ONE ANOTHER BY MAKING FULL USE OF THE DATA TECHNOLOGY AVAILABLE TO US. WE CAN RAISE A POPULATION THAT IS BOTH MORE KNOWLEDGEABLE ABOUT THEIR HEALTH AND BETTER CARED FOR BY THE HEALTHCARE SYSTEM BY INTEGRATING DATA IN THE BEST WAY POSSIBLE.



THE HEALTH TEAM:

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EXPERT ADVISOR



OSCAR DI MONTIGNY
Head of Marketing,
Communication and Innovation
at Banca Mediolanum spa

"WE WANT TO GIVE PEOPLE NEW EYES, GIVE THEM THE CHANCE TO NEGOTIATE WITH THE FUTURE, AND GET LOST IN A DIFFERENT WORLD MADE BY OUR THOUGHTS AND THE IDEAS OF OTHERS."

MARCUS WENDT

CREATIVE DIRECTOR OF DIGITAL ART STUDIO, FIELD

• Transmedia, storytelling, art and drones. Embracing technology panoptic.

Marcus Wendt, founder of FIELD, showed his recent multimedia projects and installations, including a glimpse at his forthcoming work in virtual reality. Wendt concluded that artists and designers need to embrace the new, experiment, and explore.



"DON'T CONSIDER SOMEONE AS AN ISOLATED VESSEL OF KNOWLEDGE; MAKE SURE THE KIDS IN YOUR CLASS ARE ACTUALLY WORKING AND LEARNING TOGETHER."

DERRICK DE KERCKHOVE

SOCIOLOGIST OF DIGITAL CULTURE AND SCIENTIFIC DIRECTOR OF MEDIA2000

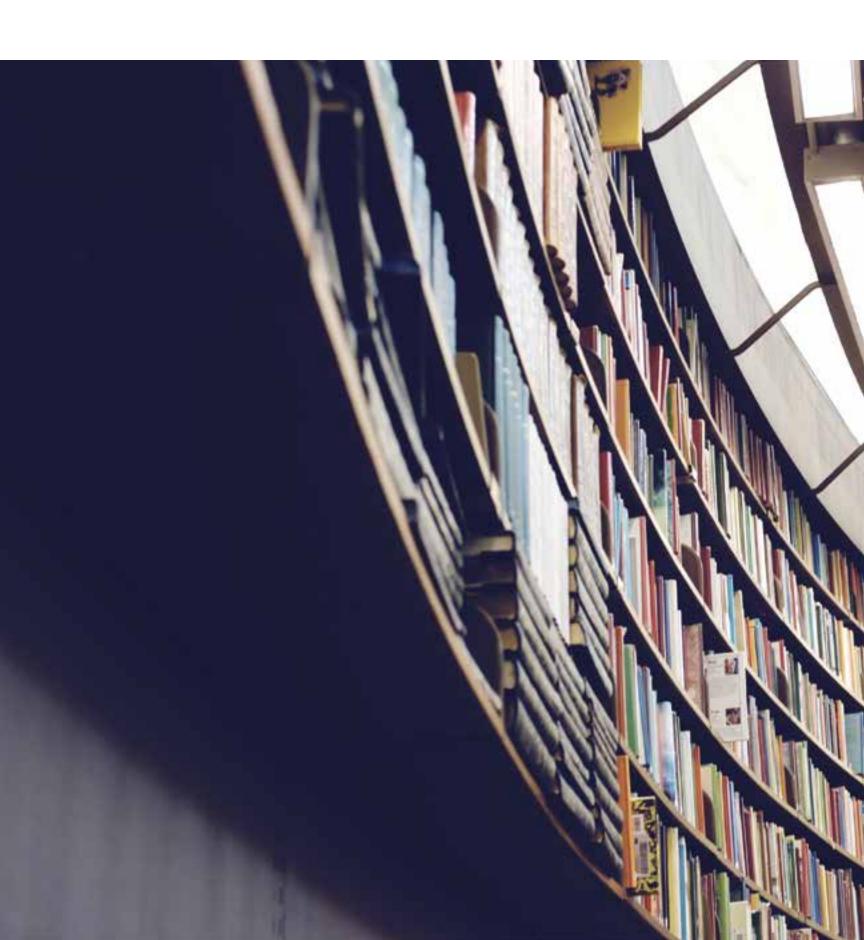
• Ethics and transparency in the age of Big Data.

Derrick de Kerckhove, Sociologist of Digital Culture, discussed the incredible and daunting future offered to us by big data. Big data, he said, offers us a new paradigm of intelligence, where the right questions will become more important than ever.

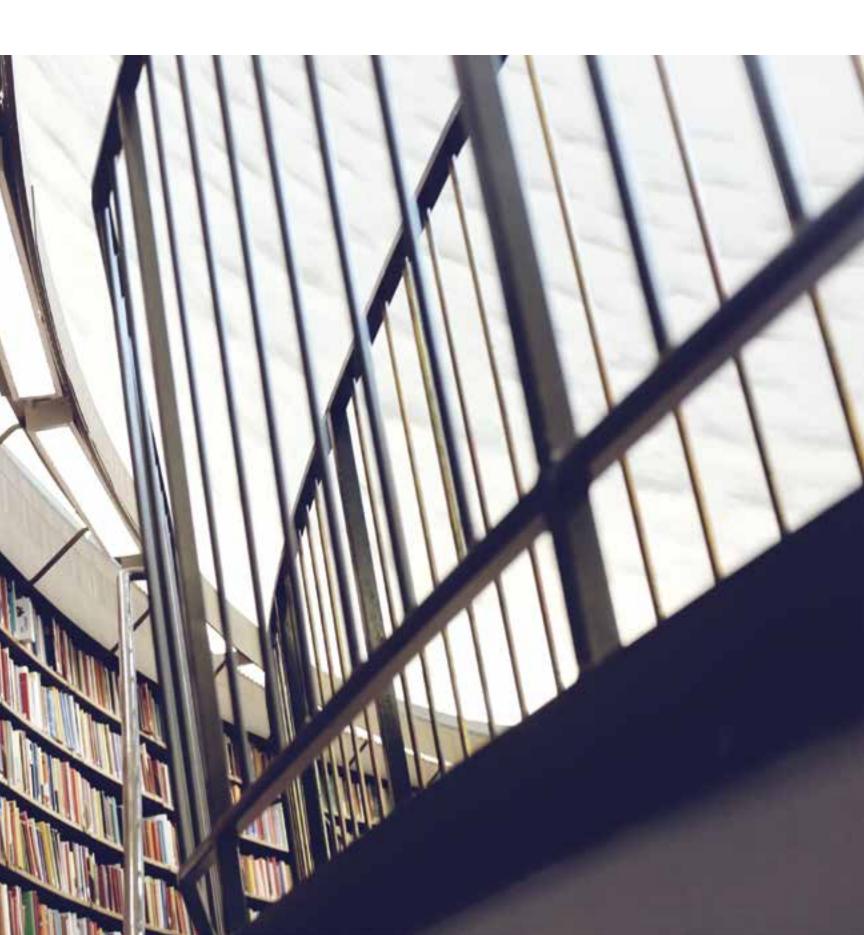




EDUCATION



Technology is transforming traditional education by extending learning beyond the classroom. The rapid pace of societal change requires learning to continue throughout one's life, so that people may perform at a high level in their evolving careers. This results in a new learning landscape that is lifelong, multi-formatted, and delivered through a variety of learning platforms.



BACKGROUND

OVERVIEW

Education brings with it transformation and development. Throughout history, individuals and peoples have grown through access to and the practice of learning.

Mankind has depended on learning since before the advent of reading. Whether embedded in the oral and sensorial traditions of pre-literate cultures, or collected in texts, or even the codes of today's digital networks, learning makes shared narratives and understanding possible, creating the civic spaces of our cities and underpinning the development of our culture.

Education brings with it an increase in awareness and a corresponding potentiality for the exercise of power. The dictum "knowledge is power" emphasizes the role education plays in an individual's agency, fomenting action through our desire for change. The potential of education makes it the cornerstone of both creation and transformation.

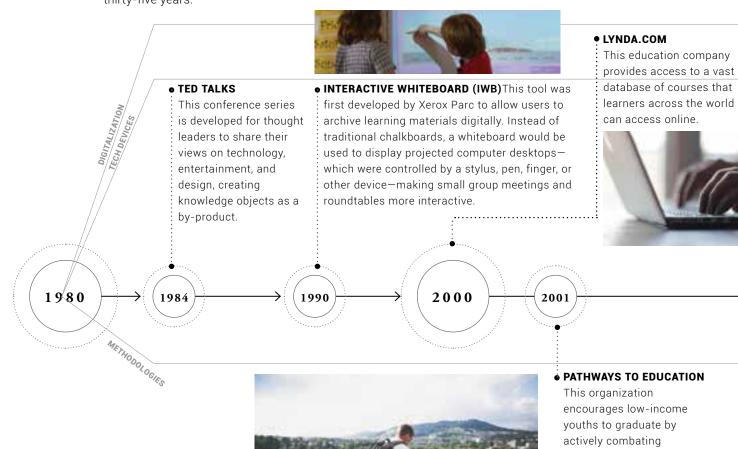
"Education is, or should be, a continuous process from birth to death concerned not so much with the acquisition of knowledge as with the expansion of consciousness. Knowledge of itself is a dead end, unless it is brought into functioning relationship with environment, social responsibilities, historical trends, human and world conditions and, above all, with the evolution of consciousness which brings the infinite vastness of an unknown universe within the range of the finite human mind."40

> - Alice A. Bailey, author of Education in the New Age (1954)

BACKGROUND

TIMELINE

This timeline shows the birth of some of the most widespread web platforms, from social media networks and sharing to crowdfunding and crowdsourcing websites. Some important developments in the evolution of communication technology are also mapped, from the 1980s to present. While change is happening outside the formal education system, internally nothing substantial has changed in the past thirty-five years.



systemic barriers that they face, thereby making learning more accessible to underprivileged communities.

• KINDLE

This Amazon-produced e-reader can hold thousands of publications in a device as small as a standard paperback.

• IPAD

Apple's tablet computer, the iPad, launches in 2010. This digital device for working, studying, and playing revolutionizes portable computing.

• OCULUS RIFT

The immersive virtual reality technology of the Oculus Rift allows users to experience whatever can be displayed through its interface.



• BABBEL

2008

This fee-based, online language learning software and e-learning platform is powered by the use of a game system.⁴¹

• COURSERA

Coursera partners with universities to provide free courses to the masses. It provides additional features that foster community learning, including peer review of work for more meaningful assessment.



2010

 $2012) \rightarrow (2013)$

2016

2025

• KHAN ACADEMY

This educational organization allows people across the globe to learn for free through online materials and resources.

• GREEN SCHOOL

This International prekindergarten to high school establishment in Bali focuses on ecologically sustainable design and sustainability education.

• FINLAND'S EDUCATION SYSTEM

Finland has worked since 2008 to develop an education system that harnesses the power of cloud technology; this new system integrates learning resources across the country so that they may be accessed globally.

• SCHOOL IN THE CLOUD

This revolutionary concept hinges on the idea that children worldwide can learn just about anything when given proper Internet access. The organization conducts "labs," where children learn through self-direction, and where observers in turn can learn from observing these children self-educate.

BACKGROUND

EDUCATION CHALLENGES TODAY

The current educational system, based on learning by studying specialized subjects in a credit hour format, was devised in the nineteenth century and widely implemented in the twentieth century. It met the needs of an industrializing world that required a skilled and literate labour force trained to execute repetitive and specialized tasks. As we enter the twenty-first century, a new wisdom-oriented knowledge society, which requires flexible, creative workers who are able to move around the globe and work collaboratively on creative projects, has emerged.

FLAWS OF THE CURRENT SYSTEM:

- No longer relevant to students native to the digital world
- Costs too much and is competing for scant resources with the health care system
- The emerging talent pool is not innovative enough
- Is standardized in a world that requires learning customization

THE SYSTEM SHOULD PROVIDE THE FOLLOWING:

- More open, compassionate, and ethical global communities of learning
- More cost-effective and flexible lifelong delivery
- More collaborative and creative thinkers
- More flexible and timely learning across disciplines
- More portability of credentials across geographic boundaries

IT IS SLOW TO CHANGE BECAUSE:

- It looks primarily backwards at history and not forward to the future
- It is overly invested in real property and physical locations, such as schools
- It is constructed to be exclusionary and hierarchical, which grades and brands people for particular roles or class positions
- Its teaching faculty and learner outcomes are overly specialized



OVERVIEW

The Keep Learning educational system is predicated on a restructuring of education to promote and support lifelong learning and access to all forms of global learning content and teaching practices. By creating a portable, modular, and flexible learning system that is internationally recognized, learners will be able to build a personalized and customized learning experience that takes advantage of the variety of existing schools and practices from around the globe.

The elements of the system include a global education charter that outlines everyone's right to continue learning. This is supported by a global Internet platform that contains a scholastic record for all learners that captures and demonstrates the knowledge and capabilities that have been acquired. The record also acts as a database for the various courses and learning methods from around the world that are available to the learner.

Layered over this is a social network of real life and virtual coaches, teachers, and mentors from whom one can learn and a digital repository of libraries of knowledge on all topics.

Most importantly, Keep Learning proposes that people combine the activities of learning, working, and playing in a synergistic combination throughout their lives to connect the benefits of each activity with the other into a seamless tapestry of experience, growth, and transformation.

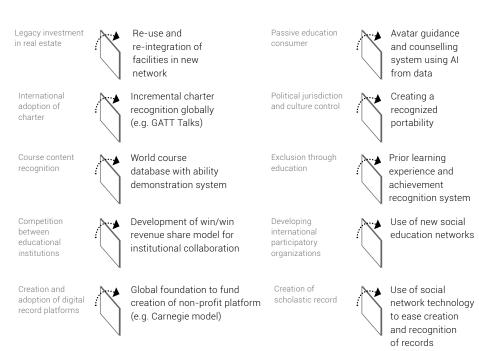


SYSTEM QUALITIES

The Keep Learning team created a set of qualities that would guide its system development. As education deals with the growth of measurable and unquantifiable outcomes, the reliance on qualities helped to ensure elasticity in the system.

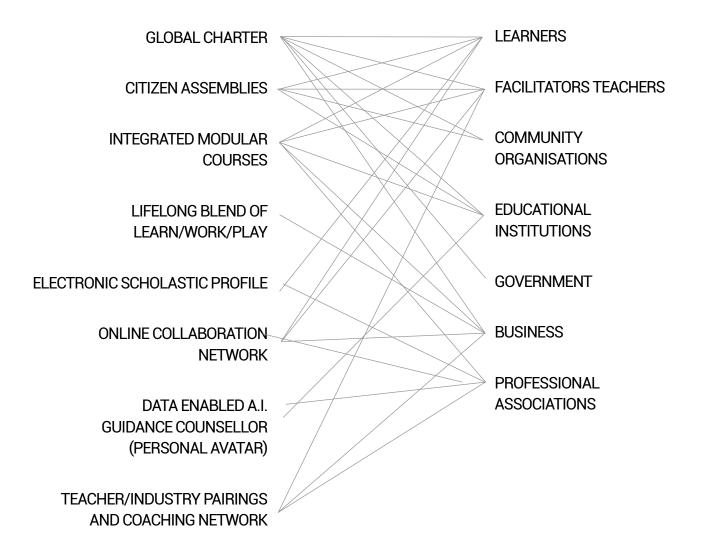
Decentralized	Creative	Collaborative
Diverse	Innovative	Active
Distributed	Imagining	Networked
Ubiquitous	Exploratory	Group
Globalized	Responsive	Hybrid
Portable	Modular	Learn
Mobile	Personalized	Work

OVERCOMING CURRENT BARRIERS



SYSTEM INTERACTIONS

To create a comprehensive system, the Keep Learning proposal sought to be inclusive of all the actors in the system and developed a governance and participation model that guided the digital infrastructure platform. This ensures maximum fluidity between all partners and participation in the system.



TEMPORAL FRAMEWORK

The Keep Learning proposal developed a temporal framework to help make the transformations that were occurring in education more digestible. By analyzing changes with history in mind, which included the thought leadership that had helped transform education over time, the team was able to construct the framework on the facing page.

TRANSFORMATION

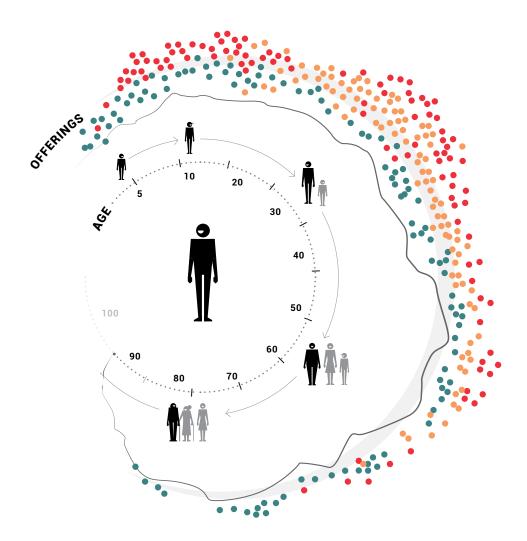
To structure goals and objectives the Keep Learning proposal developed a Now + Then matrix of transformational values to show where the system would evolve to in value proposition terms.

now - 2015		then – 2025
STANDARDIZED	vs	RESPONSIVE
SPECIALIZED	vs	TRANSDISCIPLINARY
LOCALIZED	vs	GLOBALIZED
ANALYTICAL	vs	CREATIVE
CONSTRAINED	vs	EXPANSIVE
LESSON BASED	vs	EXPERIENCE BASED
COMPETITIVE	vs	COLLABORATIVE
OWN WORLD	vs	REAL WORLD
TIMED	vs	LIFELONG

THOUGHT LEADERS	THE METAPHOR	THE TEACHERS	TYPE OF EDUCATION
LUCY HAMMURABI BRAHMA THOTH CONFUCIUS ZARATHUSTRA JESUS MOSES	LEARNING BY SHADOWING AND LISTENING	THE FAMILY AND THE COMMUNITY AND ITS MASTERS AND APPRENTICES	EDUCATION FOR AGRARIAN SOCIETIES
ARISTOTLE CICERO BACON SAINT AUGUSTUS KANT MUHAMMAD NEWTON LEONARDO DA VINCI	EATING FROM THE TREE OF KNOWLEDGE	THE BOOK AND THE SCHOOL	MASS EDUCATION FOR INDUSTRIAL SOCIETIES
PIERRE TEILHARD DE CHARDIN MARSHAL MCLUHAN RUDOLF STEINER ALICE A. BAILEY	OUTERING WITH THE NOOSPHERE	THE CODE AND THE NETWORK	OPEN EDUCATION FOR A CONNECTED SOCIETY

A JOURNEY OVER TIME

One of the key aspects of the Keep Learning proposal is a twelve-semester continuous educational cycle that allows for flexibility of working, learning, and playing throughout the year. A learner's educational journey combines these elements synergistically; these elements are based on life stages, personal growth, and development processes that recognize the individuality of the learner and societal needs simultaneously.



CURRENT SYSTEM

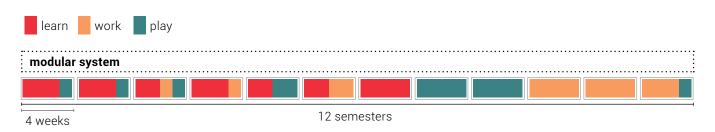
Elementary & Secondary

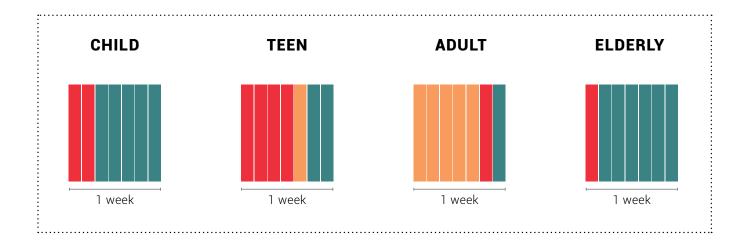
10 months learning	2 months off

4-5 month long semesters

PROPOSED SYSTEM

The proposed system has a continuous 12 semester per year flow, which allows you to granularly combine learning, working, and playing.





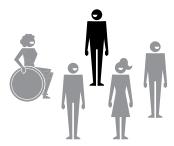
WHO YOU LEARN FROM



learner



learner + facilitator



learner + community



learner + workspace



learner + playspace

LEARNING SYSTEMS



charter



internet



modular courses



learning methods



Al avatar coach



Real life coach

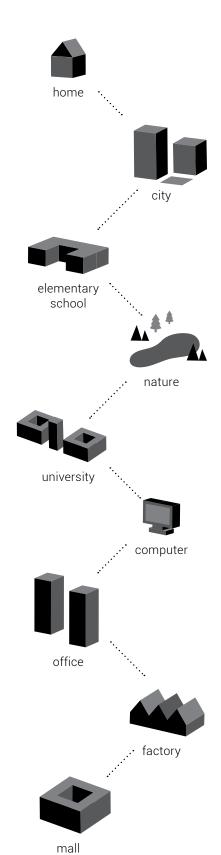


scholastic record



assemblies

WHERE YOU ARE LEARNING



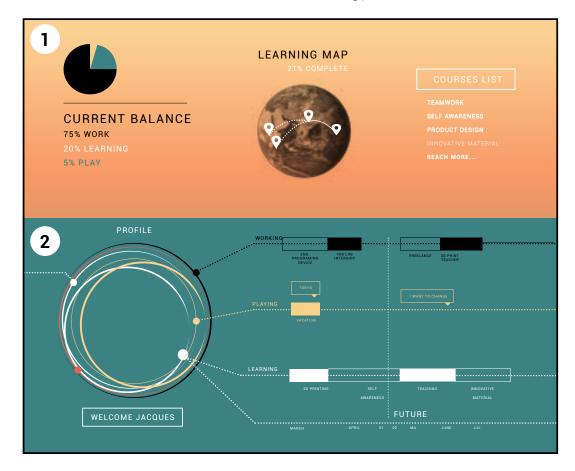
SYSTEM INTERFACE

1. LEARNING SYSTEM

Keep Learning uses a digital learning system composed of a learning record that tracks your abilities and achievements. This is coupled with a collaboration network that combines registration for various modular learning offerings online and around the globe.

2. LIFELONG LEARNING

Keep Learning proposes a recognition system of all educational offerings via an online database of courses that are recognized and accredited. They last one day, one week, or one month and run continuously year-round, maximizing access, efficiency and portability. The courses combine learning, working, and playing; in doing so, they validate different forms of experiences as part of the learning process.



CASE STUDIES



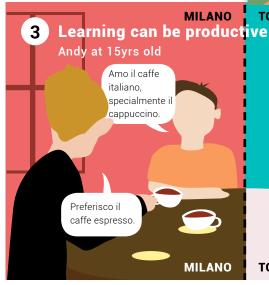
1. WORKING CAN BE FUN

When Andy is eight years old, he begins to work as a cashier in a supermarket. This work not only helps him to study math and communicate with others, but it is also a fun way to learn actively rather than taking notes in a classroom.

2. PLAYING CAN BE USEFUL

When Andy is eleven years old, he likes to go on scavenger hunts with his friends in the woods. They even use the stones and branches they find to build a little "house."



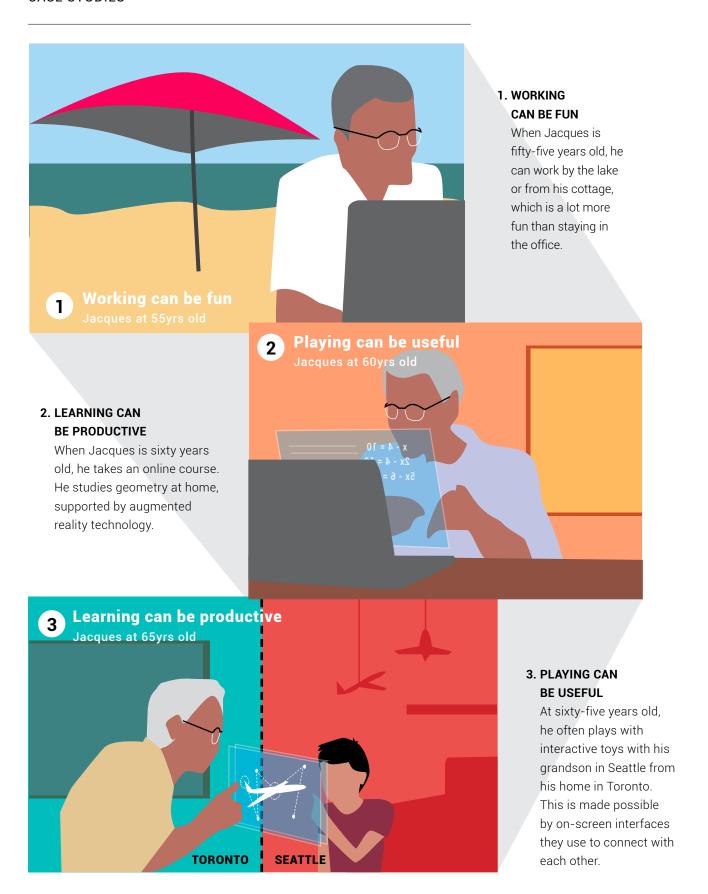




3. LEARNING CAN BE PRODUCTIVE

When Andy is fifteen years old, he goes on student exchange to Milan, while the daughter of his Italian host family stays with Andy's family in Toronto. Andy is learning Italian in a practical scenario and is making excellent progress.

CASE STUDIES



GLOBAL FRAMEWORK

Keep Learning proposes a global framework for education supported by a global charter for learning that is developed by a non-partisan World Education Foundation.

The Charter and its framework for governance are managed by a series of assemblies representing learners, teachers, businesses, governments, professional associations, and local communities. The international governance structure is facilitated by social media platforms.

THE GLOBAL CHARTER

Below is an initial list of key values for the Charter.

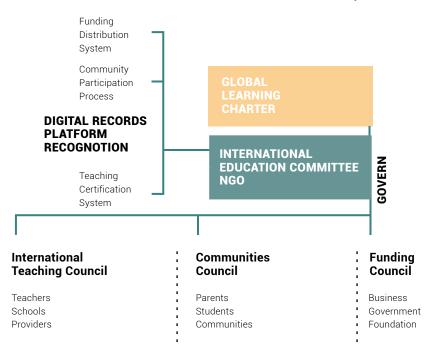
Learning should improve the quality of life for all by being accessible to all

People are free to change and grow over time through learning

Learning should be inclusive of all knowledge, both traditional and new

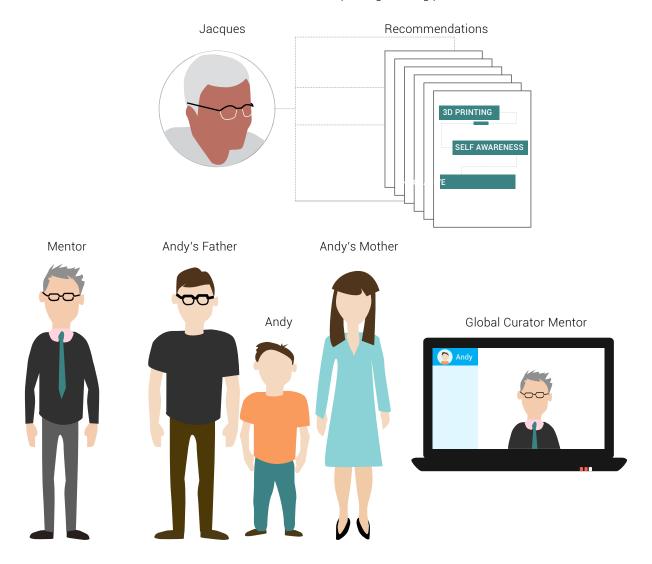
Learning should be available to everyone, everywhere, all the time

Learning should reflect the diversity of learners and their diverse knowledge, beliefs, and value systems



MENTORSHIP

Keep Learning proposes a mentorship system based on personal and associated mentor networks that are supported by collaboration tools on the Internet. In addition, all members will have a personal avatar that uses artificial intelligence to help document and support their progress by maintaining learning records and updating learning plans.



FUNDING MODEL



Funding Global Assemblies and Mentorship Program.

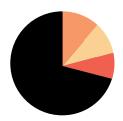
The global assemblies should be financed by government with small participation fees from business, communities and individual learners.



Government 60% Communities 10% Learners 10% Business 10%

Funding Online Platform And Charter Development.

The digital learning platforms and global charter shoulld be developed by a non-partisan global foundation with representation from business, government and communities



Foundation 70% Business 10% Government 10% Communities 10%

.....:

Funding Digital Learning Platform Operations.

Operating the modular lifelong learning system requires investment in operations by government and business in a private/public partnership with small user fees by communities and learners.



Users 10% Communities 10% Government 50% Business 30%

Funding for Location Inventory Capital.

Building the physical network of flexible spaces should be shared by business, the community and government more equally through the provision of in-kind real property to reduce the cost to the system and enhance flexibility of space provision.



Business 40% Communities 20% Government 40%

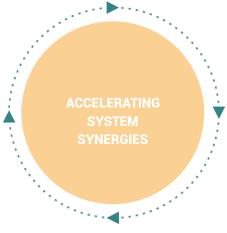
STRATEGIES TOWARDS SYSTEM IMPROVEMENTS

2. Decrease capital costs through decentralised shared spaces.

Goal: Move from 100% to 50% capital spending

1. Increased system productivity from running year round

Goal: Move from 75% to 100% utilisation



4. Reduce welfare costs by integrating re-motivated learners that are employable.

Goal: Reduce welfare costs by 80%

3. Increase lifelong participation through choice of modular learning modalities

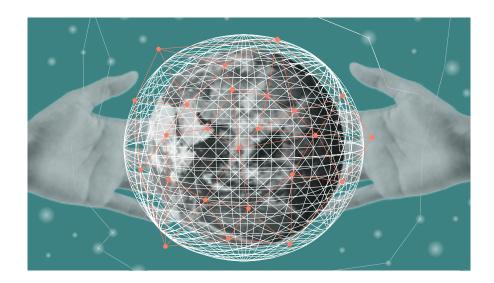
Goal: Move from 30% to 100% in life long learning participation

CONCLUSION

From the learned person to a learned society, the thrust of the Keep Learning proposal is to build the connective tissue that bridges play to learning and learning to working in a synergistic combination.

Keep Learning looks to reconceptualize life—which is too often regarded as a set of sequential learning passages—as a mosaic and a tapestry of experiences that allow for our own personal growth. This new format for education accelerates both personal development and an increasing interconnection and complexity of social interactions. This will create a global consciousness that

will provide for a more sustainable, inclusive, intelligent, and ethical world. By using globalized digital tool sets and fostering global assemblies of interest with those tools, we can reorganize the current system to perform more productively. This will release and enhance people's creative energies so that they can manage and synthesize the increased complexity of operation required by our civilization.



IN THE FUTURE, THE ACQUISITION OF KNOWLEDGE WILL BE REGARDED AS A LIFELONG PROCESS THAT COMBINES LEARNING, WORKING, AND PLAYING WITHIN A TAPESTRY OF EXPERIENCES—BOTH DIGITAL AND PHYSICAL. THIS PROCESS WILL CONNECT WITH THE EXPERIENTIAL KNOWLEDGE GAINED FROM DIFFERENT PEOPLE, PLACES, AND PRACTICES ACROSS THE GLOBE, AND IN DOING SO, HELP INCREASE OUR WISDOM AND COMPASSION.



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"AN EMOTIONAL GEOGRAPHY HAS TO LOOK
AT THE WAY WE COME INTO CONTACT WITH
SPACES AND WONDER ABOUT THE EMOTION
THE SPACE PROVOKES. LOOK AT SPACES
AS A REPOSITORY OF OUR STORIES, OUR
MEMORIES, AND OUR WISHES."

GIULIANA BRUNO

EMMET BLAKENEY GLEASON PROFESSOR OF VISUAL AND ENVIRONMENTAL STUDIES, HARVARD UNIVERSITY

We must look at the role of materiality in a world where matter and the media are constantly changing.

Giuliana Bruno, Professor of
Visual and Environmental Studies,
argued for the depth of surfaces
and screens. Taking examples
from architecture, classical
literature, and the history of
cinema, Bruno described the

depth, power, and wonder screens and surfaces still hold over us. Rather than saying surfaces are superficial, Bruno contended that screens allow us to bring what is important to the surface.



"WE'VE GOT ALL THESE SMART FLOORS,
SMART TOILETS, SMART LIGHT SWITCHES,
AND SO ON. HOW ABOUT PEOPLE THAT
THINK? INSTEAD OF JUST SMART THINGS,
WHY NOT ALSO SMART PEOPLE?"

STEVE MANN

PROFESSOR OF COMPUTER ENGINEERING AT THE UNIVERSITY OF TORONTO

• Honoured with the Digital Pioneer award, Steve Mann reflected on the highlights of his prolific career with sensing technology.

From an early age, Mann was fascinated by television, for all that he could see and all that it could show him. Throughout his career, he created innovative inventions that used digital technology to augment human perception: a camera that could reveal its field

of view through light; a series of head-mounted, wearable computers, known as the WearCam. But more than just technological innovation, Mann emphasized that no matter how "smart" you can make technology, it will be worthless if its users aren't smart.



FOOD



Food is both essential for life and an extension of culture. Globalization will continue to create new food cultures, technologies, and awareness. As we evaluate how we will interact with food in the future, we must consider the entire food system, from field to table.



BACKGROUND

OVERVIEW

This project imagined how people would live with the food system in the next ten years.

While we don't claim to have solved all of the complex problems associated with the food system, we have suggested solutions to improve people's experience with food and make them more aware of issues related to food production, waste, distribution, storage, processing, and consumption.

In February 2015, the New York Times reported that "people in some poor and middle-income countries have healthier diets than those in rich ones." In recent years, people living in rich countries are getting used to eating more than their bodies really need. In other parts of the world, however, there are 795 million people suffering from hunger.

The Barilla Centre for Food and Nutrition reports that, rather paradoxically, both food production and hunger are on the rise. 44 The only way this is possible is through an inefficient system that allows profoundly unequal distribution of resources. People must change their eating habits in order to transform

our current system into one that accommodates the food needs of the entire world, rather than leaving certain regions disproportionately underserved.

Today, one third of the world's food production is destined for cattle,⁴⁵ while what remains faces the threat of an increasing share of arable land used for biofuel production that encroaches on land that could be used for vegetables or fruit cultivation.⁴⁶ More disconcertingly, one third of the food that we produce is ultimately wasted.⁴⁷

Nostalgia for the "old ways" of doing things is common to all cultures. Perhaps because of this nostalgia, more traditionally-produced agricultural products, such as organic produce, are in high demand.⁴⁸ In the coming ten years, we believe that this desire for a return to more traditional methods can be integrated with the use of highly technological food solutions, which can bring to people a greater understanding of where their food comes from and how it is produced.



BACKGROUND

FOOD CHALLENGES TODAY

We want to imagine a future that engages the globalized food system through a series of tactics that understand its working processes and begins to solve critical problems. There are six key problems with the current system.

- 1. The current system has a high cost of entry and is difficult to penetrate in terms of access to production, distribution, storage, and waste
- 2. The system is not transparent; it does not provide consumers with adequate information about the origins of their food⁴⁹
- **3.** The system is not equitable or ethical because of vast inequalities in food distribution

- **4.** The system is inefficient and promotes selfishness and wastefulness among consumers⁵⁰
- **5.** The system is devoid of unique experiences, culture, and identity
- **6.** The system creates unhealthy choices with an endless variety of similar products



BACKGROUND

TIMELINE

The ways that we interact with food have changed considerably over time. We have become hungry for more information about where our food comes from and how to reconnect with its production. Consumers will continue to seek more of this knowledge in the future.

GLOBAL CEREAL PRODUCTION 7.1 TRILLION 7.1 TRILLION 6.9 TRILLION 6.9 TRILLION Factory farming produces most of the world's poultry and eggs, and about half of all 6.8 TRILLION pork and beef products. The • Use of inorganic fertilizers sees a record decline. 55 use of this industrial livestock • 75 percent of production model continues • Organic farming has rapidly increased in the world's to increase.52 popularity and is now in use in 141 countries.56 agricultural genetic diversity is gone.51 Food prices are on the rise, pushing consumers to adjust which cuts of meat they purchase.53 2004 2006 2007 2008 2009 2012

- Farmers can use seed preservation and careful cultivation to manage the diversity of their crops and share their work with other farmers.

• Over 2 billion tons of grain were produced in

2007, and despite this being a tremendous

that it is still not enough to meet demand.54

increase from the previous year, it is expected

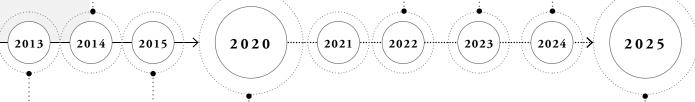
- 3-D printing of food begins to take off, presenting a promising view of the future of food production.⁵⁷
- Meat production increases rapidly. The United Nations Food and Agriculture Organization predicts that by 2014, 311.8 million tons of meat products will be produced annually.⁵⁸

7.2 TRILLION

- Milanese people have a preference for purchasing groceries at supermarkets.
 Milan is also home to 80,000 solidarity purchasing groups.⁶⁰
- In the 1950s, Milan was a heavily agricultural municipality. However, today only 19% of the area is farmland.⁶¹
- Genetically modified (GMO) crops occupy 181.5 million hectares of land worldwide.⁵²

- Schools: Public and private school children will have the chance to learn about growing healthy food easily and interactively with the use of high-tech machines.
 - **Restaurants:** Food experiences will be more transparent. Diners will be given the opportunity to know exactly what they are eating and the origins of the raw materials as if they were cooking the meals themselves.
 - Supermarkets: Offerings will be more carefully tailored to customers' demands; the produce's seasonality and scarcity will be taken into account when stocking the shelves.

e Public areas: Food experience will be highly customizable due to a combination of efficient technologies and shared human experiences.



The first burger produced from in-vitro beef was created and eaten in Holland.⁵⁹

- **Kitchens:** These will be spaces where play, collaboration, and knowledge come together to create a mix of high and low-tech experiences that will change the way we think about food.
- The world's first restaurant experience featuring
 3-D-printed fare takes place as a pop-up event in London.⁶³

More than 80 percent of farmland will suffer from soil degradation-related losses in productivity, and over 3 billion people will live without sufficient access to water. 64 Integration of new technologies and greater awareness of our relationship to food and nourishment will be essential to our well-being.

OVERVIEW

We propose to examine key touch points where the public interacts with the food system to understand how the system might be altered by 2025.

Our intention was to intervene at critical junctures with systemic changes that altered our current relation to food into one that understands more deeply the entire supply chain of food production and the impact of our consumption patterns on our health and the planet.

- 1. The Kitchen
- 2. The Restaurant
- 3. The Supermarket
- 4. The School
- 5. The Public Space
- 6. The Airport



VALUES FOR THE FOOD SYSTEM

In order to understand how food will look in the future, we first have to imagine what we want our future to look like. These are eleven points that outline a future we define as desirable and reasonable for society.

- 1. Ensure resources are distributed evenly and equally around the globe
- about food to encourage good choices
- 2. Empower people to fulfill their basic needs for nourishment
- 7. Increase access to public information about food
- 3. Create healthier cities with better nutrition
- 8. Make power structures more accountable to food safety issues
- 4. Enhance genuine human interaction through food culture
- 9. Better integrate work, life, and eating
- 5. Create more transparent systems that describe food sourcing, production, and ingredients
- 10. Promote societal collaboration around food production
- 6. Enable freedom of information
- 11. Allow for stronger food personalization and diversity

welcome to POST YOUR VISION www.meetthemediaguru.org CULTURA INNOVAZIONE IDEE LOOK

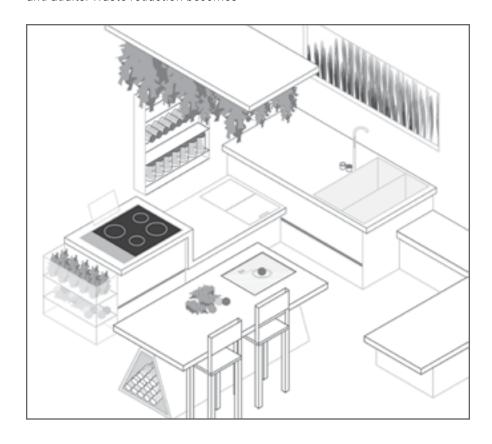
THE CREATIVE KITCHEN

The Creative Kitchen is an environment that allows people to come together and use both complex and simple technologies to create daily meals in a multiplicity of ways.

By integrating devices that manage raw food creation and growth into the kitchen, the concept is to free up time for food preparation. Different zones in the Creative Kitchen are designed to be more than just a place for food preparation; instead, they are a kind of play and work space for children and adults. Waste reduction becomes

a theme in the Creative Kitchen, as household waste is converted into energy to power the different devices in the kitchen.

Water is divided into two separate uses. Potable water remains for drinking, while grey water is used for cleaning and growing. The system is integrated into the kitchen and can be switched on with the turn of a tap. Spaces for kitchen accessories are all located below counter height for easier access.



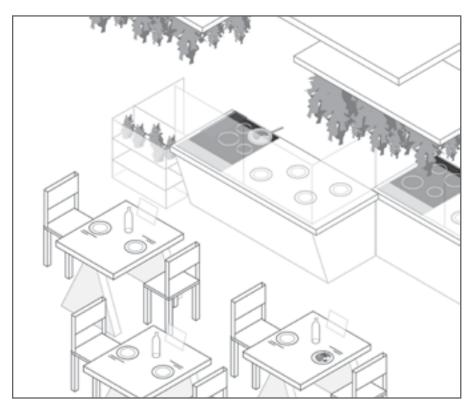
THE RESTAURANT

Due to the increase of consciously healthy consumers and a demand for good food and unforgettable experiences, restaurants in 2025 will transform themselves to cater to those needs.

Transparency and efficiency have become common denominators when it comes to dining outside of your home. The flexibility in service time and quality of food provided has made it easier to dine out comfortably in 2025. Customers can bring their own ingredients to the restaurant and can access the back of house to

collaborate in the cooking process, thereby attaining an efficient home dining experience while out.

Tracking technology will be available to assist staff in keeping track of plate ingredients and nutrients at a micro scale; the tracking technology will also help place orders for refills and/or make ingredient suggestions through its interactions with the bigger food system on a broader scale (i.e. receiving notifications on current foods that are in season or in danger from disease or pollutants).



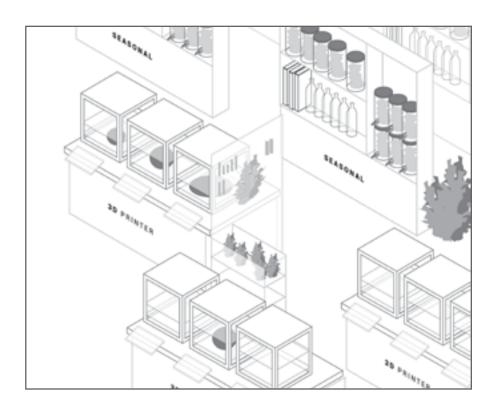
THE SUPERMARKET

What was once a standardized location that offered distribution of packaged foods and delivery has transformed into an efficient system with an automated and shortened delivery process.

Due to high demand and consumption patterns of food, providers have attempted to offer products according to their seasonality and human intake needs. This is achieved through information supplied by customers.

Food providers and consumers interact with a system that customizes food purchases according to both the buyer's health background and the availability of fresh and healthy food products through an expert matching system.

Food will require less packaging than in the street markets of the past. Buyers wishing to supplement products not in season can access 3-D food printers to attain the missing nutrients and flavours.



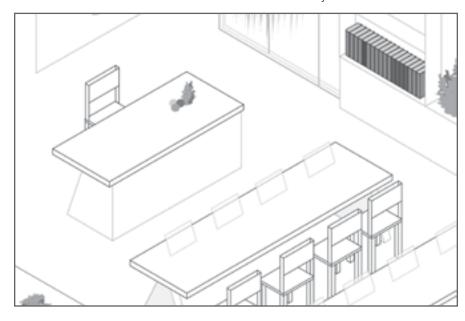
THE SCHOOL

Education plays a very important role in changing problematic food habits. Gardening lessons can make children more conscious about healthy food. Students should also feel the pleasure of growing and then making something nutritious with their own hands.

Children will transmit these learning experiences about food to their families. This will help to solve the unhealthiness that our current food system facilitates and promotes under the dubious guise of convenience.

Low-tech aspects of this scenario: High-tech aspects:

- Planting seeds and contact with land
- Growing healthy food (vegetables and fruits)
- Nursery rhymes to teach children the importance of eating high quality food
- Machinery to help plants to grow faster
- Mobile/tablet apps telling you when product is ready to be harvested
- Tablets and multimedia techniques for teaching food literacy

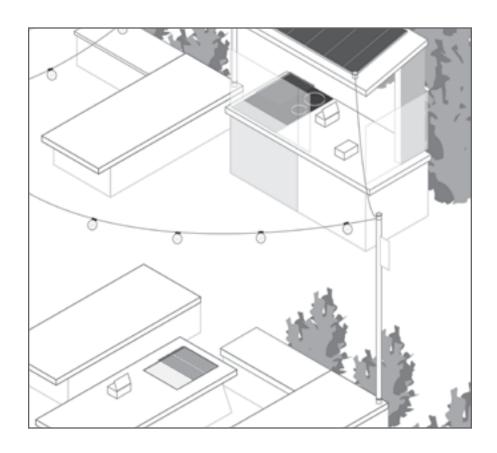


THE PUBLIC SPACE

In 2025, the places where we eat in public will no longer be chosen randomly. When buying food in town, mobile apps will suggest the best fit for you based on your personalized data about what food you want to buy, your location, and even your current mood. The high-tech dining experience will be highly customized.

There will also be many more popup markets that sell raw food from family-owned farms and outdoor restaurants that use renewable energy.

Thanks to mobile apps, the connections between customers, chefs, and material suppliers will be closer, so organizing a family dinner party in a public place will be more flexible and easier to realize. People will have more do-it-yourself options when dining out.



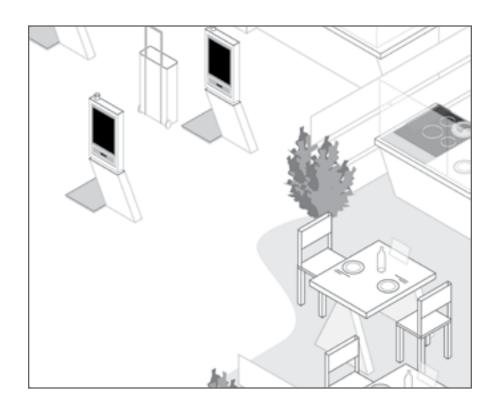
THE AIRPORT

Due to the high influx of European travellers in 2025, smaller airport hubs will be distributed around cities, making them more accessible. Airlines will also create more efficient, seamless, and healthy experiences for travellers.

Access to food will be highly dependent on the traveller's needs, health conditions, and the time of travel. As soon as travellers enter the airport, their bodies will be scanned to identify their stress and health level. In a matter of seconds, the system will provide the travellers with suggestions on what type of food to eat before

getting on the flight, helping them prepare physically and mentally for the stress of air travel.

Sometimes, the system recognizes similar travellers and increases the likelihood that they will cross paths. With little waiting time, the traveller is sent to the correct tunnel to board their plane. If flights are long, the attendant will provide meals that suit the travellers' needs. The airport food system in 2025 will have little waste due to fewer packaged products delivered daily directly from food dispensers.



CONCLUSION

Though awareness around food systems is increasing, in the future we will see even greater integration of data and technology that will give us a better understanding of where our food comes from.

Our interaction with food will allow us to once again be an active part of our food system. We will no longer be alienated from our food by political and physical barriers. This reduction in barriers will both reaffirm our emotional and cultural relationships to our food, as well as foster better health through more informed eating decisions.

EVERYDAY FOOD
IN THE FUTURE, OUR FOOD
SYSTEM WILL SEAMLESSLY
INTEGRATE FOOD DATA,
CONSUMER DEMANDS, AND
NUTRITION INFORMATION,
COMBINING THE BEST OF
TRADITIONS WITH THE
CONVENIENCE OF INNOVATION
AND PERSONALIZATION.



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ANNA MERONIAssociate Professor of Design, Politecnico di

"INSTEAD OF TALKING ABOUT VIRTUAL REALITY, I LIKE TO TALK ABOUT REALITY AS A CONTINUOUS FABRIC THAT IS FOLDED."

LUC COURCHESNE

MEDIA ARTIST & DESIGNER

• Ambient intelligence and the connection to large complex systems already exist and continue to grow.

Luc Courchesne, visual artist and professor, does not believe people will still consider virtual reality as separate from our physical reality. Courchesne, invoking the philosophy of David Hume and Gilles Deleuze, considers the virtual merely another fold of reality. The job of the artist,

Courchesne explained, is to illustrate the intersection and transitions between all the folds. Courchesne then presented his current work at the Society of Art and Technology in Montreal, which included a panoramic telecommunications installation.













GLOBAL CITIZENRY



A PATH TO GLOBAL CITIZENRY

The combination of production and organization from the Meet the Media Guru team and the design leadership from Institute without Boundaries staff members allowed students and professionals from around the globe to work together seamlessly. The charrette team, which at first blush seemed not to be the normal composition one would assemble to rethink our societal systems, performed diligently and admirably developing projects in a short, five-day period. In the Institute's experience, a diversity of intellects and cultures within working groups always results in thought-provoking and compelling ideas.

The specific wisdom that emerged from the collaboration in Milan confirmed that a systems redesign is needed and that the next ten years offer a space for innovation, which contemporary society must seize. It became apparent through the ensuing projects that we must coordinate systems across jurisdictional boundaries, which have become increasingly less relevant to the coming generations and will alter radically with time. All those present considered global access to services a basic human right that transcends political boundaries.

The projects and the Gurus' contributions showcased a future that emphasizes interoperability facilitated by a transparency of information and access to global connectivity through communication networks and protocols. The future described in the projects and the one we saw in the images and through the words of the MTMG international Gurus reduced digital clutter by better connecting functions and creating smart environments, systems, and services that are linked by layers of technology that allow for increased personalization, customization, and augmented decision making.

On reflection, an interesting primary theme of automated intelligence emerged. Almost all the projects focused on the ways data collection, analysis, and synthesis could build expert advisory systems that are accessible to people around the globe. This data could then be used to augment the individual's decision-making processes and help improve quality of life.

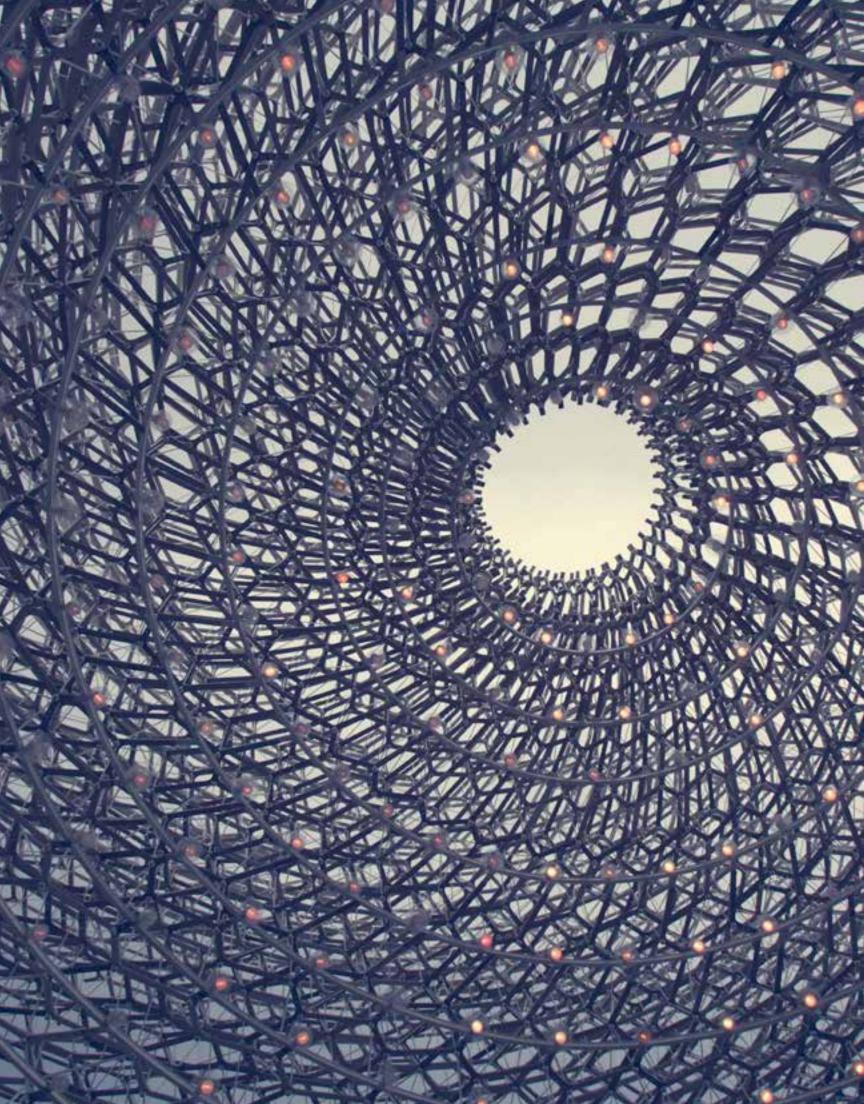
This process of collection, reflection, and mapping patterns of information offer the potential of transforming physical and social realities by making them more accessible and potentially more democratic. The contingent benefits include the optimization of energy and resource expenditure, as well as the enhancement of human creative capacity and productivity.

Most projects aim to distribute such

benefits to a wide array of the citizenry and to engage citizens in the process of co-creating and managing their societal systems.

This bias for participatory design and control of systems surprisingly pointed out a variety of imperatives that were not obvious at first, but which upon digestion gave us pause for consideration and debate. It sparked in us a much needed impetus to sort through the problematics of designing systems that will work the way we intend them to.

With every imagined benefit in each of the projects came a need for legislative, technological, and personal change that we may not be quite ready for. The Global Village designs that were dreamed up carried with them imperatives that will challenge our society for generations to come.



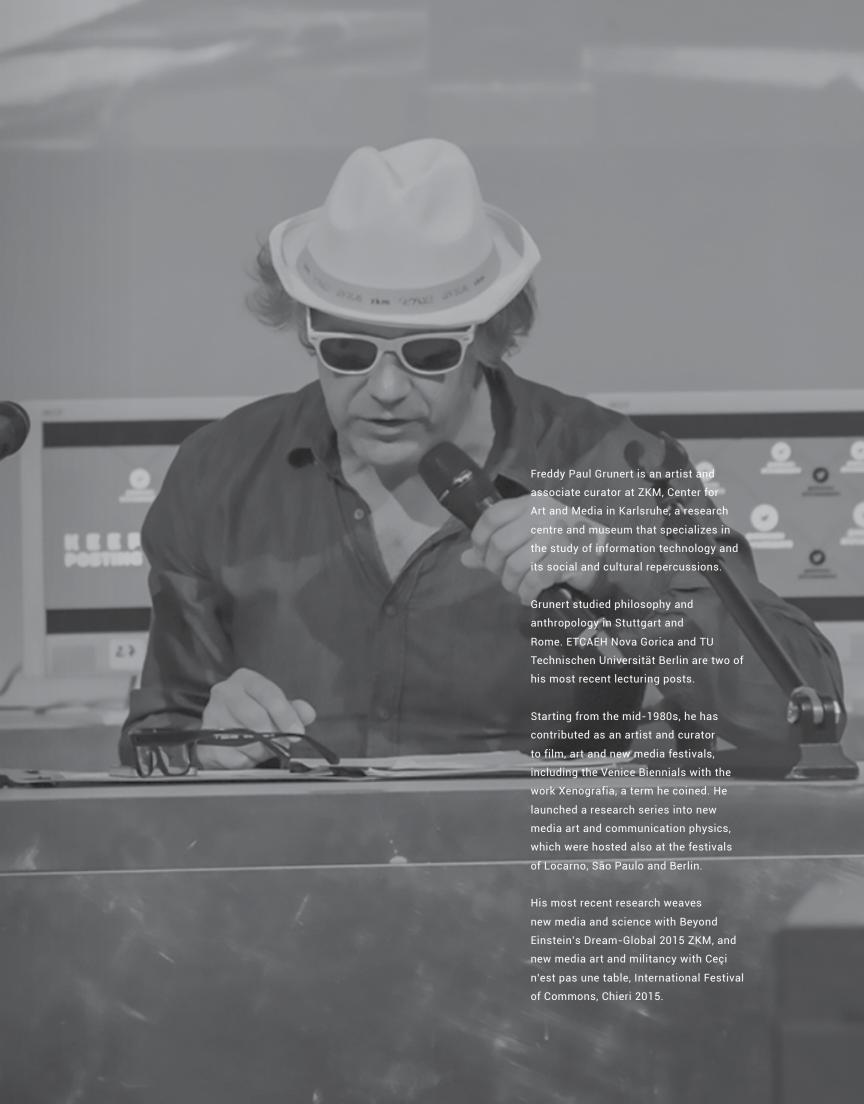
"THE SHARING OF INFORMATION BETWEEN MEN IS A SUBSET OF THE UNIVERSE AND THUS PHYSICAL PHENOMENA THEMSELVES ARE PHYSICAL INTERACTION TOO."

FREDDY PAUL GRUNERT

ARTIST AND ASSOCIATE CURATOR AT ZKM, CENTER FOR ART AND MEDIA IN KARLSRUHE

• The photon is a data transmission channel.

Freddy Paul Grunert, visual artist and curator at the ZKM, spoke about his new installation on light, produced with the help of astrophysicists. Grunert advised the audience to rethink how we use technology to visualize and interact with light.



IMPERATIVES FOR A GLOBAL VILLAGE

The possibilities highlighted in the final projects as well as the scenarios explored by the Gurus reveal a set of imperatives that will demand from us creativity in our adaptation and reconstruction of our Ways of Living. These imperatives can be seen as challenges, but they can also inspire us. They will demand from us new ways of thinking and being that are still unfamiliar and as yet ill-defined. This diagram presents an overall picture of the traits that are part of this emerging paradigm of a globally organized society.

WE ARE ALL PART OF A WORLD HOUSE

The ability to transcend boundaries and offer services to every citizen, regardless of jurisdiction, race, creed, and culture, is needed if we are to bring justice and equality to all citizens of the planet.

A HOLISTIC SYSTEM DEMANDS TRANSPARENCY

It will be necessary to be transparent, open, and democratic in our decision-making and operations in order to recognize and balance the needs of all citizens and life forms on the planet.

DIFFERENT IS BETTER THAN PERFECT.

The desire to promote diversity of offerings and cultures forces us to understand that there are no perfect standardized solutions for citizens, but rather citizens should be given the opportunity to build, personalize, and customize system services to meet their needs and enhance their abilities.

I SHARE THEREFORE I AM

The willingness to provide and share information will enable planning, exchange, and connection at the societal level; it will also allow us to learn more about ourselves in relation to others and to contribute to the greater good.

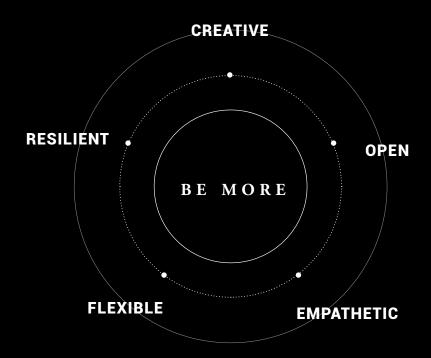
THE PERSONAL IS THE POLITICAL

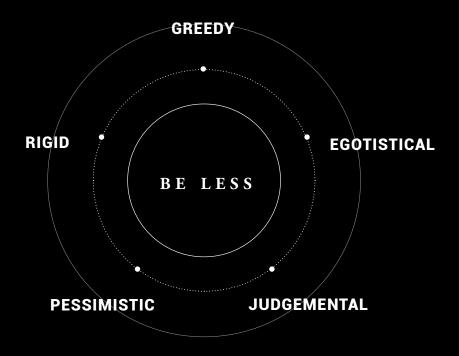
The will to take responsibility for our personal behaviour helps us be accountable to others in the context of increased interconnection. This includes increasing the visibility of our actions and choices and their impacts on others.



CREATING A WORLD OF MORE AND LESS

These imperatives challenge us to live in an imperfect world. It is a world with a new set of values, some of which should be valued more highly in the future and some of which may need to diminish over time. They will enable us to achieve the Future Ways of Living we envisioned. To achieve a Global Village we need to:





"YOU CAN PUSH TECHNOLOGY TO A POINT WHERE WE DON'T NEED MUCH AROUND US, BUT WE WILL CONTINUE TO SURROUND OURSELVES WITH THINGS THAT ARE BEAUTIFUL, DELICATE, AND PERSONAL."

MARK ROLSTON

FOUNDER AND CHIEF CREATIVE OF ARGODESIGN

 We want to bring design and technology back to a natural state, where it becomes virtually invisible.

Mark Rolston, designer and founder of argodesign, spoke about the future of computers aiding human beings in their decision-making. He pointed to the emergence of self-driving cars and lifestyle apps as the first steps toward a world where human beings will make every single decision with the assistance of a computer.



PROBLEMATICS TO EXPLORE

QUESTIONS THAT NEED ANSWERS

This world we imagine poses a set of problematics that need to be considered, contended with, and ultimately solved through improved and detailed systems design and implementation. In order to achieve the outcomes imagined through the charrette process, the issues listed below will need to be examined and the possible negative consequences determined and mitigated by proper systems design. We have compiled a list of key questions that we believe must be examined over the coming years.

PRIVACY & TRANSPARENCY

How much privacy can we live without in order to gain the benefits of connectivity?

How much transparency can we accept without feeling our identities are at risk?

How will we live in a system that tracks our transgressions and misdeeds, requiring of us both accountability and forgiveness?

ARTIFICIAL INTELLIGENCE

How much guidance and prompting are we willing to accept from intelligent machines?

What will we do with ourselves if automation and intelligent systems take over the bulk of our current work?

Will automation and personalization hyper-individualize us and destroy our sense of family, community, and cultural identity?

DIFFERENCE & COHESION

How much difference can we live with before it erodes our sense of social cohesion?

Will too much history, both societal and personal, diminish our ability to focus and create new things?



collaboration while preserving the autonomy of

local jurisdictions?

FINALLY, HOW FAST CAN CHANGE HAPPEN WITHOUT BECOMING DISORIENTING?

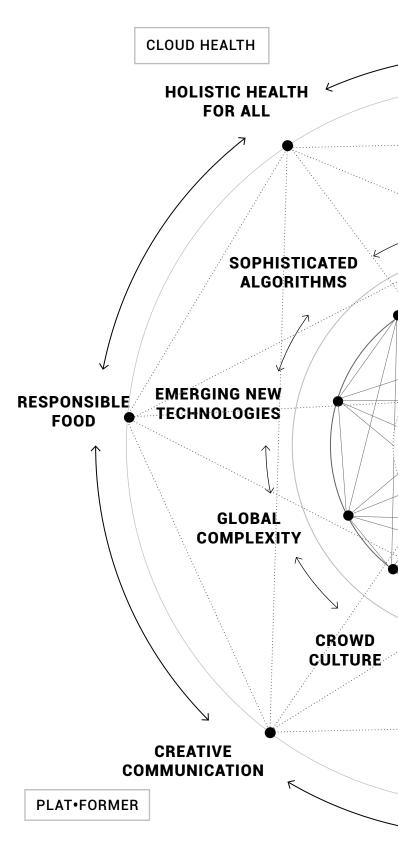


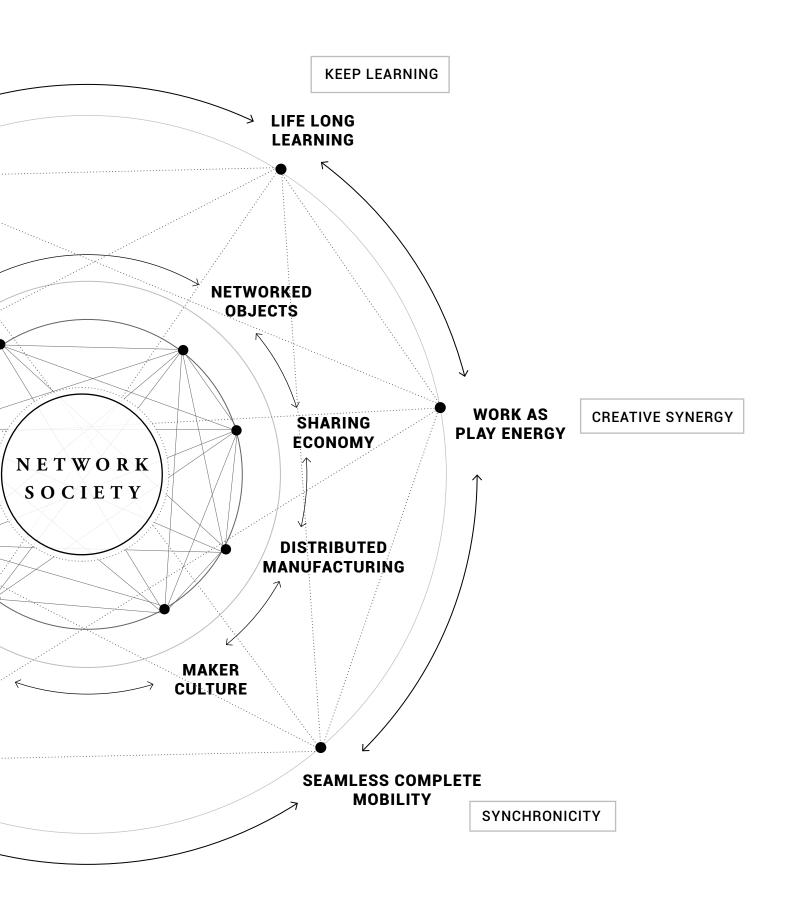
THE NETWORK SOCIETY & THE GLOBAL VILLAGE

A SET OF PROJECTS FOR OUR IMMEDIATE FUTURE

While all of these proposals for societal systems were conceived by teams working specifically on the redesign of one system, what became clear to all during the charrette process was the strong potential for the considered interaction of all of these systems as a whole. If the systems were studied in relationship to each other as a next step and follow-up exercise, further insight could be gained about how they could work synergistically. While the coordination required of such a highly integrated set of systems components is potentially overreaching and complex to manage, as a thought exercise, it could potentially enhance and improve the design of the sub systems. The following diagram captures an overview of how the projects might synergize in a vision for a networked society.

EVERYDAY FOOD

















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We like to think that everyone who was part of this event, from the Gurus to the creatives, is now part of an extended family that will continue to contemplate Future Ways of Living in their own lives.

Luigi Ferrara Maria Grazia Mattei

MTMG

Meet the Media Guru (MTMG) is a space for thoughts, ideas and events focused on innovation and digital technology. Founded in 2005 by Maria Grazia Mattei, Meet the Media Guru has planned meetings with leaders of digital culture such as Zygmunt Bauman, Manuel Castells, John Lasseter, Lawrence Lessig, Edgar Morin, Don Norman, Carlo Ratti and many others. The MTMG format uses an interactive, immersive communication that engages its audience both on and off line with streaming, social media, and visual graphics. From 2005 to 2015, MTMG hosted 74 talks and 36,000 participants, becoming a landmark in the Italian debate on future trends and paths. In addition to featuring lectures for the mainstream audience, Meet the Media Guru also promotes different events such as MTMG

Executive, dedicated to professionals and companies, multi-voice debates called MTMG Focus, and MTMG tours to international partners, exhibitions and special projects. All of these different methods work to promote the free dissemination of ideas and digital culture. Since 2013, MTMG lectures have been published as a collection of "A tu per tu con la cultura digitale" by Egea Editore. Additionally, the full lectures video archive is on Meet the Media Guru site for free. In 2015, MTMG celebrates - in collaboration with Toronto's Institute without Boundaries - its tenth anniversary with Meet the Media Guru Special Edition | Future Ways of Living to outline the next 10 years of innovation all over the world with three weeks of Charrette Lab, two Guru Days and one closing event: Toronto meets Milano.

www.meetthemediaguru.org

IWB

The Institute without Boundaries (IwB) was founded in 2003 by the School of Design at George Brown College, in consultation with Bruce Mau. The IwB is a Toronto-based academic program and studio that offers unique educational experience and professional services. The Institute focuses on collaborative design practice with the objectives of social, ecological and economic innovation through design research and strategy. Central to the work of the IwB are real projects of public and global significance that are executed by students, faculty and industry experts either as part of the academic curriculum, research initiatives, or creative projects. The Institute has three divisions: an academic postgraduate certificate

program called Interdisciplinary Design Strategy, a research division that supports special projects that further the IwB's objectives, and a professional projects division that offers consulting services. As a top design training and research centre, the IwB is committed to collaborative and interdisciplinary design practice. At the Institute, we see the designer as a problem solver with the ability to affect positive change for humanity. We are a place where students, teachers, industry and community experts come together not only as creators and designers, but also as ambassadors of hope. We imagine how to live, learn, work, and play together as a global community and seek alternative development patterns and viable paths to a bright future.

www.institutewithoutboundaries.ca

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A SISTER CITY COLLABORATION

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FASTWEB is the largest alternative fixed-line telecommunications provider in Italy. Its radically innovative vision enables FASTWEB to benefit from a successful business model, both in its offer to the residential market and to the business market, where the company generates more than half of its revenue. In this segment, FASTWEB has established its leadership as the principal alternative provider for large corporations and for the Public Administration. In line with its history and its innovative strategy, FASTWEB has decided to further focus on the extension of its fibre optic infrastructure in order to provide high quality services to more Italian families and companies.

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Artemide

The Artemide Group is one of the global leaders of the residential illumination sector and is a high-end professional company. It has an ample international distribution presence, in which the single brand showrooms sprout in the most important cities in the world and as "shop-in-shops" in the most prestigious of illumination and furniture shops. Founded in the 1960s, Artemide is one of the most well-known illumination brands in the world. Known for its philosophy of "The Human Light," it is synonymous today with design, innovation, and Italian-made products.

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Fondazione Fiera Milano promotes and guides the development of the exhibition industry and oversees the transformation of Milan's exhibition system into one that is more modern, updated, and internationally competitive.



Chamber of Commerce of Milan is a public body which performs functions of general interest to the business system, taking care of development with a particular focus on local economies.



Comune di Milano is the main industrial, commercial, and financial centre of Italy and a leader in the creative economy. It is the second largest city in the country and the capital of the Region of Lombardy.



The City of Toronto is Canada's commercial capital, the most populous city in Canada, and the capital of Ontario.

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Ambasciata dei Paesi Bassi a Roma e il Consolato Generale a Milano is one of the 150 worldwide embassies and consulates-general of the Ministry of Foreign Affairs of the Netherlands. Embassies and consulates are active in development cooperation, cultural affairs, and media relations.

OFFICIAL EVENT OF



Expo in Città is a project developed by the Municipality and Milan Chamber of Commerce that coordinates and promotes the offer of cultural and recreational initiatives, and which will be held inside the metropolitan area during Expo 2015.

IN COLLABORATION WITH



Mediateca Santa Teresa is the multimedia branch of Biblioteca Nazionale Braidense of Milan, where the city can access the most important digital, historical resources of the media era.



Politecnico di Milano is a scientific-technological university which trains engineers, architects and industrial designers. Established in 1863, Politecnico di Milano offers its students some of the most advanced laboratories for scientific and technological research in the world.



Cumulus is the only global association to serve art and design education and research. It is a forum for partnership, the transfer of knowledge, and best practices. Cumulus currently consists of 211 members from 48 countries. The Italian Chamber of Commerce of Ontario strives to be a dynamic platform that promotes Italian-Canadian excellence in a business-oriented, cultural, and social dimension. This creates an effective synergy between its Italian and local partners while contributing to Canada's national agenda on prosperity, globalism and cultural dialogue.



La Triennale di Milano is a design and art museum, housed in the Palazzo dell'Arte, which was designed by Giovanni Muzio. The museum hosts exhibitions and events which highlight contemporary Italian design, urban planning, architecture, music, and media arts, emphasizing the relationship between art and industry. The museum also houses the Collezione Permanente, a collection of significant objects in contemporary Italian design.

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