The What If? Report

Proceedings from the March 2021 Online Workshop at Presidio Graduate School

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By: Jimmy Jia

With contributions form Beth Robinette, Carey Gersten, Ellie Sharpe, India Rose Matharu-Daley, Jameson Morrell, Kristen Nadaraja, Martina Doleshal, Ramses Cabello, and Vikki Owens



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Executive Summary

The March 2021 What If? Sandbox was held at Presidio Graduate School as part of the innovation module of the Strategy curriculum. In convening a diverse range of stakeholders, practitioners and students, we facilitated and searched for unlikely, yet meaningful, connections between critical topics that our society faces today.

Keynote: What is the decision point for an agriculture business to become regenerative?

- We need to de-risk business model innovations in agriculture. Innovations need to include "formulas" that help farmers see and make the transition.
- Financial resources are not being deployed to the stages of the value chain where systemic changes are needed. Therefore, partnerships across the supply chain are needed to make necessary systems change.

Keynote: Who makes climate change-oriented decisions in the corporate world?

- Environmental, social and governance (ESG) and sustainability professionals sit across organizations with varying degrees of influence and authority. There needs to be translation between the jargon of different functional groups.
- Map the KPIs of functional departments to CO₂. Find which KPIs are not linked to emissions and try to connect their KPIs to the environmental impact of the organization.

Breakout Question: How can manufacturers move into the circular economy?

- There are two different feedback loops moving at different rates: the economic/financial feedback loop and the ecological/planetary. There is a lack of alignment between the loops and value is placed on sale and use.
- Enrich user experience by creating a label (or QR code?) that can provide messages or space to create connection between who owned the garment / product and the next user.

Breakout Question: How can we create connecting experiences in a virtual world?

- Virtual spaces can welcome different voices who are more comfortable communicating on that platform. However, it can also create barriers of communication and engagement for those less familiar with it.
- The physical world is a multi-sensory experience while virtual is not. The virtual world may help us appreciate the physical world more.

Breakout Question: Why should the community facilitate everyone's role in climate change?

- Flip the script what is everyone's role in facilitating a community's role in climate change? Rethink what community means and how to truly be responsible for and accountable to the communities we are already in.
- Lead with the history of place and the collective interest to tell the story of climate change as it relates to the geographic community.

About the What If? Sandbox

Climate issues require a systems approach; and although companies are making progress in their internal plans and processes, gaps exist between and within sectors, providing ample opportunities for the innovation economy to lead the way.

The What If? Sandbox is a series of retreats, both virtual and in-person, which create new network connections among the attendees by working through our mutual uncertainties and risks to produce thought-pieces that connect systemic problems with bite-sized solutions.

Such unaddressed gaps can create jobs, spur new product innovations, support local economic development and exemplify global leadership in a climate-resilient future.

Attendees

Thanks to the attendees and organizations for participating from across the world:

Organizations

- Bio-Rad Laboratories
- Certified Scrum Master
- CleanTech Open
- ExxonMobil
- GAN Integrity
- Jacobs Engineering
- LINC Foods
- My Green Lab
- ORS Impact
- Oxford University
- Presidio Graduate School
- Ratio Institute

Locations

- California
- Colorado
- Massachusetts
- Oregon
- Texas
- Washington
- Denmark
- Taiwan
- Switzerland
- United Kingdom

Hosts:



Martina Doleshal teaches Strategy at Presidio Graduate School. She is an innovation specialist in the healthcare space. She has helped successfully launch novel healthcare products into global markets and diverse regulatory environments for startups and global pharmaceuticals, such as Novartis. She graduated with an MBA from Presidio Graduate School and an MS in Biochemistry and Biotechnology from the University of Chemistry and Technology in Prague, Czechia.



<u>Jimmy Jia</u> teaches Strategy at Presidio Graduate School. Professionally, he works at the convergence of energy, innovation, and strategy. He specializes at using energy indicators to enhance strategic initiatives and corporate governance. He has authored multiple books and articles, and is a frequent speaker on topics of energy futurism. He graduated from MIT and the University of Oxford.

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Plenary Talk: What is the decision point for an agriculture business to become regenerative?

A reflection by Beth Robinette, Co-Founder of LINC foods



Beth Robinette is the Co-Founder of the Local Inland Northwest Cooperative (LINC) Foods. It is a worker and farmer owned food hub based in Spokane, WA, providing locally and sustainably grown produce, dairy, grains and meats. LINC connects farmers to wholesale suppliers as well as consumers to build a regional sustainable food system. She is a graduate of Bainbridge Graduate Institute and Western Washington University.

On Innovation

Problem: There is a lack of innovation in agriculture, in part because farmers are risk-averse and lack capital to experiment.

Possible Solution: We need to de-risk business model innovations in agriculture. Example innovations could include access to capital, allowing for long-term experimentation that matches agricultural cycles, and "pay-for-success" models.

Problem: Farmers don't see clear and easy to adopt alternatives to conventional agriculture practices.

Similarly, innovation happens all too often when it is needed to survive. In these
situations, farmers are at risk of trying out new ideas randomly instead of
systematically.

Possible Solution: Innovations need to include "formulas" that help farmers see and make the transition.

Possible Solution: Proactive funding from the government to de-risk ideas and create formulas for farmers to follow.

Problem: Early adopters of sustainable innovation in food supply chains are incentivized by helping set the rules of the game. Lagging adopters will be punished.

Possible Solution: How can regenerative agriculture practices help set new standards?

Problem: All the solutions proposed require money! Many farmers are just trying to get by. The textile industry suffers similarly— very high margins at retail but small profits in earlier stages of the value chain.

Possible Solution: Financial resources are not being deployed to the stages of the value chain where systemic changes are needed. Therefore, partnerships across the supply chain are needed to make systems change.

On (Un)natural Practices

Problem: Conventional farming doesn't play on nature's team as it's trying to disrupt the natural cycle to create human benefits.

Possible Solution: Adapt the philosophy of "Nature Plus One". In this approach, nature performs its natural function. Humans interact gently, only to tweak it in a direction that gives a better outcome. This harnesses nature's power. For instance, rotational grazing every 12-hours enables pastures to naturally recover instead of having to rely on chemicals.

Problem: Most agriculture machines built today only reinforce the monoculture system, as they are only able to work with one crop at a time.

Possible Solution: Can we invent machinery that can be used for multiple crops to make polyculture systems economically viable?

Problem: Science and nature of agriculture is often misaligned with money and economic goals.

- The commodities market, which is the only thing some farmers have access to, may demand unnatural practices. For instance, farmers may need to calve too early for the livestock to react to the market.
- Farmers bear the cost of affordability for customers.

Possible Solution: Can the financial system be adapted to run at the pace of nature? For instance, farms can take 10-15 years to develop a new variety or have to wait 5-7 years after planting to see returns. Although long-term investment in change and slow money are not new concepts, their application to agriculture would be helpful.

Problem: Some countries, such as Peru, are dependent on food exports to the US. Localizing the US agricultural system could negatively impact farmers elsewhere.

Possible Solution: Reframe our conversation about food connections. How do people want to be connected to food?

On Cultural and Societal Concerns

Problem: Language, like the term "regenerative agriculture," alienates people. Regenerative agriculture is very white.

Possible Solution: The industry needs a leader who can lead the conversation to change key practices. Education, examples of successes, tools and resources can only get us so far.

Problem: We have put too much value on convenient, cheap food. We should value food more than iPhones.

Possible Solution: What if the agriculture sector led the change in how people valued necessities?

Problem: There are equity issues with localizing food markets. For example, farmers markets can be expensive and there isn't equal access to them, both economically as well as geographically.

Possible Solution: Communities must manage their relationship to food. Create closer linkages between farmers and the people, communities and cities that are being fed.

Possible Solution: Respect the prices at farmer's markets for quality over convenience.

Plenary Talk: Who makes climate-change oriented decisions in the corporate world?

A reflection by Jameson Morrell, Sustainability Intelligence at Jacobs Engineering



<u>Jameson Morrell</u> is the Practice Leader, Sustainability Intelligence at Jacobs Engineering (NYSE: J). He helps corporate clients embed sustainability as a design factor for a better future. Prior to Jacobs, he has also worked in financial operations at Bank of America and as Vice President of Knowledge Management at Deutsche Post DHL.

On Influence and Pressure

Problem: Environmental, social and governance (ESG) and sustainability professionals sit across organizations with varying degrees of influence and authority.

Possible Solution: There exists a holistic need to communicate effectively to have influence.

Possible Solution: This communication may be translation between the jargon of different functional groups.

Problem: There are many organizations in the business involved in shaping company strategy.

Possible Solution: How can we identify the organizations and sub-departments that need to be involved in climate change related decision-making?

Possible Solution: How can we build organizational structure across traditional functions to tackle sustainability topics?

Problem: There are many stakeholders of a company, each of whom may have different values and priorities.

- How do these pressures affect the company's sustainability in operations?
- How does a company's ownership structure, such as cooperative, publicly traded and privately held, govern its sustainability?
- How does a company overcome the inertia to change when too many stakeholders are involved?

Possible Solution: What is the map of external pressures that exists on the company, such as regulations, reputation, science-based targets, etc. Connect these external pressures to internal operational decisions.

Possible Solution: What is the map of internal functions that can best respond to external pressures? Match each external pressure to internal function.

On Metrics

Problem: How do we quantify the social and environmental impact of CO₂ emissions?

• How do different organizational groups interpret the same metric? For instance, does CO₂ emissions carry the same relevance and importance across operations, facilities, real estate, investors, debt holders and so on?

Possible Solution: Map the KPIs of functional departments to CO₂. Find which KPIs are not linked to emissions and try to connect the KPI to the environmental impact of the organization.

On Actions

Problem: Given that there is a dynamic network of hierarchical authority figures and de facto influencers within a company, how can climate change emerge as a shared priority?

Possible Solution: Provide consistent education to the entire company about how climate change is impacting the company's operations.

Possible Solution: Have generative conversations (lunch & learns) about sustainability and resiliency amongst multi-disciplinary groups of people so that everyone learns from each other.

Problem: How do we choose the levels of resource investment in *sustainability*, or the proactive impact the company has on others, and *resiliency*, the reactive impact the environment has on the company?

Possible Solution: Other risk management functions (enterprise, financial, etc.) need to be involved to grapple with the tension between proactive and reactive investments.

Breakout: How can manufacturers move into the circular economy?

Facilitated by Carey Gersten and Kristen Nadaraja



<u>Carey Gersten</u> brings a career of over 30 years developing markets and deploying leading edge business solutions ranging from Fortune 100 to start-ups. He has been a National Outdoor Leadership Educator and has served on the boards of several not-for-profits that have helped to improve local and regional community including the Washington Water Trails Association and the Food Forest Collective.



Kristen Nadaraja's experience is in Tech, Strategy, and Social Responsibility. She has worked at Accenture, Business for Social Responsibility (BSR) and Gap, Inc, was a founding member of the Natural Resources Defense Council's young professionals board and has served on the board of an educational non-profit and on the volunteer fundraising committee for the Bay Area Discovery Museum.

On Consumer Behavior

Problem: What are discrete circular behaviors consumers can make within the circular economy? Consumers may feel that their actions are not powerful enough to make meaningful impact on the current socio-economic system. For instance, consumer behaviors that support the circular economy, such as reusing containers, zero waste, etc., are seldom recognized by "the market."

Possible Solution: Create a recognizable and meaningful rewards and incentives system that showcases the tangible accomplishments of consumers and quantifies these impacts in an easy to grasp way. This may encourage circular behaviors on a greater scale.

Possible Solution: Could we create an economic unit of ecological restoration that might have to be part of the market price?

Problem: For consumers, changing behavior and culture to support a circular economy is not easy or the most attractive thing to do. Buyers go for things that are "soon, certain, and positive." How do we encourage circular behavior choices which go against primitive behavior?

Possible Solution: What if there was a circular economy process for a "consumer pays" system?

Possible Solution: Build campaigns around how circular behavior can satisfy "soon, certain and positive" drivers, albeit different drivers from traditional behavioral choices. Capturing the "soon, certain and positive" mentality may help drive adoption of circular behavior.

Possible Solution: Reduce consumer barriers by increasing the number of dropoff and material recovery locations. Perhaps offer free shipping for circular goods.

Possible Solution: Make the customer feel good about supporting the circular economy and companies/brands that operate circularly.

Possible Solution: Create campaigns tugging at the heartstrings of the Boomer generation, the nostalgia of reuse and caring where things came from and where they end up.

On Management Systems

Problem: Although circular economy is gaining momentum and popularity, the circular economy framework is poorly understood and recognized on a meaningful scale.

Possible Solution: Partner with prominent non-profits and think-tank organizations in the circular economy space (such as the Ellen MacArthur Foundation) to conduct "brand awareness" campaigns where the circular economy is the "brand" being promoted.

Possible Solution: Align communications campaigns with existing consumer demand for sustainability, especially focusing on the rise of the conscious consumer segment.

Problem: Silos in design and (re)manufacturing lead to minimum reuse of raw resources and result in more material byproduct and process waste than necessary.

Possible Solution: Establishing partnerships between companies can increase the material that is recovered from manufacturing, creating a new value zone, and making circularity something viable, realistic and meaningful in terms of impact.

Possible Solution: Understand barriers to scale for existing material reuse programs, such as USBCSD's Materials Marketplace.

On the Financial System

Problem: The economic value of goods is very different from the environmental value. How do we measure the circular economy in a way that is still tangible for companies and consumers (aka, dollars) while meeting goals of circular behavior?

Possible Solution: Provide case studies of companies, cities, or regions (such as Amsterdam and their Donut Economics approach) that quantify the benefits of shifting to a circular economy in financial language. In essence, focus on the business case for making such a change.

Possible Solution: Create a way to place value on or measure resources, how they are extracted, what's right for the planet and the ethical role for a company.

Problem: There are two different feedback loops moving at different rates: the economic/financial feedback loop and the ecological/planetary. There is a lack of alignment between the loops and value is placed on sale and use.

Possible Solution: There needs to be a commitment from C-Suite to expectations regarding circularity, KPIs, and profit vs. environmental and social impact. This can contribute to the brand perception and monetary gains.

Possible Solution: Build the value proposition around aligning with customer demand for sustainability and the growing zero waste movement, in particular Millennial and Gen Z demand.

On Data

Problem: Data is necessary to establish benchmarks of the circular economy. This might include metrics such as operational improvements, decarbonization progress, material recovering, and so on.

Possible Solutions: Create an open-source data center that collects information from manufacturing that can lead to better lifecycle analysis (LCA) and greenhouse gas (GHG) measurements across industries. Open-sourced data would make GHG management a commons problem.

Possible Solution: Utilize cloud-based technology that can allow businesses to better understand transparency and circularity metrics in their supply chains.

Problem: How do you create a repository for personal connection to the story of stuff? This could be where it comes from, what it's made from, where it is going, what is it going to be made into, etc.?

Possible Solution: Enrich user experience by creating a label (or QR code?) that can provide messages or space to create connection between who owned the garment product and the next user.

Breakout: How can connecting experiences be created in a virtual world?

Facilitated by Ramsés Cabello and India Rose Matharu-Daley



<u>Ramsés Cabello</u> is an interaction designer. Based in Denmark, he leads the design team at GAN Integrity, where he leads the research prototyping and validation of compliance products. His inspiration comes from meeting people from all around the world while traveling and from practicing minimalism and simple living.



<u>India Rose Matharu-Daley</u> is an environmentalist seeking future-forward regenerative solutions to the climate and biodiversity crises. She has enjoyed a wide variety of professional experiences around the world in strategy, technology, product design and management. India graduated from the University of Cambridge with a double first-class degree and high academic honors and from Presidio Graduate School with an MBA.

On the Virtual World:

Problem: What if everyone has different definitions or experiences of the "virtual world"?

Possible Solution: Start by sharing people's virtual stories. Smartphone conversations, video games, zoom meetings, avatars, and collaborative platforms, such as Slack and Miro.

Problem: How do we avoid "getting lost" in the virtual world?

Possible Solution: We may need to protect essential spaces in the virtual world and the physical world.

Possible Solution: People may need to learn how to set boundaries between the virtual and the physical world.

Problem: Why are some people meaner in the virtual world than in real life?

Possible Solution: Acknowledge that there is an emotional and spiritual disconnect when connecting virtually. The connections seem more abstract. We need to learn how to use verbal cues to replace physical cues.

On the Human Experience:

Problem: Virtual connection lacks emotional connection (like physical touch and body language). Lack of physical connection may make it hard to stay engaged when working or communicating virtually.

Possible Solution: Invest in multi-sensory technology as well as using a variety of virtual tools and environments to maintain engagement.

Possible Solution: Place more value on in-person interactions when they happen.

Problem: Virtual spaces can welcome different voices who are more comfortable communicating on that platform. However, virtual spaces can also create barriers for communication and engagement for those less familiar with them.

Possible Solution: Acknowledge people's different comfort levels. Redesign spaces and conversations to include all voices. This could also make people more sensitive to people's level of comfort in meeting face-to-face.

Problem: Technology separates us from reality. Toxic behaviors can emerge through the use of technology, such as racism in video game engagement, because there is less accountability. Only seeing the "highlight reels" of one's friends can make one's own life seem mundane by comparison.

Possible Solution: There need to be new social contracts that increase accountability for actions online. Are there morals and values that we need to agree on while interacting in virtual environments?

Possible Solution: Normalize showcasing parts of life that aren't part of a "highlight reel."

Subsequent Problem: Who would be responsible for conceiving regulations in the virtual world? How do we conceive regulations in the virtual world?

Problem: The virtual world ties us to our desks and constant screen time may lead to physical and emotional fatigue. How do health issues shift in a virtual experience?

Possible Solution: Build into one's day the time away from screens. Normalize not always having to join calls via video, so that one can take a walk. Build in the practice.

On the Physical World

Problem: How do the differences between the virtual and physical worlds affect our interactions?

Possible Solution: Virtual worlds can create the feeling of togetherness when everyone's remote, creating realities that don't exist. Virtual platforms can break some barriers, but they will likely construct new barriers.

Possible Solution: The physical world is a multi-sensory experience while virtual is not. The virtual world may help us appreciate the physical world more.

Problem: Does the virtual world affect our expectations of the physical world? How would it affect our relationships?

Possible Solution: The connections established in the virtual world can do some good. They could play a role in how we design our relationships and cities. Physical spaces may take on a new role. Be aware of the limitations of virtual connections, yet use physical contact to enhance the virtual experiences and vice versa.

Breakout: What is the community's function in facilitating everyone's role in climate change?

Facilitated by Vikki Owens and Ellie Sharpe



<u>Vikki Owens</u> is a certified Scrum master who is also PMP trained. She empowers teams to achieve objectives and key results by applying the most appropriate Agile tools, techniques and best practices. She was the former Chair of Logistics and Operations at the MIT Enterprise Forum Northwest.



<u>Ellie Sharpe</u>'s experience spans from leading corporate sustainability reporting initiatives to bringing segment-defining products to market across early- to mid-stage startups and multinational corporations. She sits on the board of Women in Cleantech & Sustainability (WCS), a Bay Area nonprofit focused on empowering women in the green economy.

On Participation and Inclusion

Problem: There is this idea that people in positions of power do more to change or dismantle their power and give it back to the people. But this perpetuates a continued lack of responsibility for everyone to act and step up to lead in community spaces.

Possible Solution: Flip the script – what is everyone's role in facilitating a community's role in climate change? Rethink what community means and how to truly be responsible for and accountable to the communities we are already in.

Possible Solution: Figure out how to build stronger communities. This can take us back to our community-based social roots and grow the power of our communities to stand in opposition to systems that create inequity and violence.

Problem: Existing power structures silence some voices, meaning voices from many grassroots organizations and communities are not heard.

Possible solution: Local communities are truly responsible and accountable for their members. Community-based social roots and other micro-approaches are a grassroots way of enabling climate change collaborations.

Subsequent Problem: However, when we form cooperatives, employees (owners) do not take true ownership and responsibility for how the organization functions and its role in the community.

Problem: Children and young people, who are likely most affected by climate change, are not valued for their leadership capacity on climate and community issues, nor allowed in most spaces to take leadership.

Possible solution: How do we engage more young people in leadership positions and give them a voice, like Greta Thunberg?

On Capitalism and the Community

Problem: Corporations are deciding for communities what their environmental priorities are, and communities aren't standing up to voice their own priorities. This could lead to well-intentioned corporate-led efforts that backfire.

Possible solution: Corporations need to hire local community development experts who can respectfully work with on-the-ground community leaders.

Problem: Capitalism, as we know it today, is effective at obtaining certain objectives, such as meeting financial KPIs, but not for providing the greatest good for most people.

Possible solution: Local communities have different needs. Examine hyper-local, place-based projects that focus on communities, oral histories, cultures and the environment.

Possible solution: Create alternative incentive models for corporate behavior to encourage active attention to environmental, social, and community KPIs.

Problem: Marketization and globalization have led to the 'averaging out' of culture in society. This has led to violence against some groups that are not in the mainstream.

Possible solution: Lead with the history of place and the collective interest to tell the story of climate change as it relates to the geographic community.

Possible solution: Focus on people acting together, not individuals on their own. A community can be formal or informal, large or small. We can extend or shrink our ideas to fit a community of any size.

Possible solution: Create safe psychological spaces for people with differing beliefs to interact.

On the Environmental and Social Implications

Problem: We tend to approach making decisions from a place of scarcity and our decision frameworks are protectionist.

Possible solution: What if we started from a place of abundance? Decision-making from that platform is very different.

Problem: In most of this work, there is a bifurcation of environmental and social/human aspects. Yet the problems and solutions are highly intertwined.

Possible solution: Create a community podcast to localize climate change communications

Possible solution: Create a new climate change story that documents the assumptions and habitats in a community or culture and identifies the opportunities for telling a story that is from the environment's point of view.

Problem: Our transactional mindset is not a good approach to stewardship of natural resources, such as air, water, land, infrastructure, etc. This has led to extractive and exploitative uses. How can we improve ownership and management of the commons?

Possible solution: If leveraging the existing capitalist system, give natural resources personhood rights, as Ohio attempted to do for Lake Erie but blocked by a federal judge¹.

Possible solution: More publicly owned businesses that serve the public good, such as electric utilities. This is an older model that's regaining popularity again.

Possible solution: Use Elinor Ostrom's work on successfully managing the commons to inspire new partnerships to govern common resources. The Poseidon Principles, governing maritime finance, is one such example of a successful application of common resource management.

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¹ https://www.theguardian.com/us-news/2019/feb/28/toledo-lake-erie-personhood-status-bill-of-rights-algae-bloom