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HOW TO USE THE BOOK

Welcome to 2021 edition of Design Lab's foresight. The project this year was wholly dedicated to exploring the post-pandemic implications of COVID-19 in the U.S.

This foresight booklet is designed to guide you on how to use futures thinking for yourself and in conversations with others. As we continue to physically isolate, we wanted to create something that can be easily downloaded and worked on independently wherever you are.

Bring with you some markers and a sketchbook so you can scribble on. Please share your thoughts with Dlab at dlab@hal.hitachi.com.

WHY DO FORESIGHT?

... To ask meaningful questions about the present.

In foresight, we use provocations and questions to push people to think beyond their comfort zone. We challenge our own assumptions, practices, and biases through imagining the many different possibilities ahead. The value is in engaging in the exercise itself, NOT in predicting the "accurate" future.

In this booklet, you will find stories, prompts, and activities for shaping your futures thinking mind. We hope to guide you from "what will happen in the future?" to "what are the possibilities of the future?" Ultimately, we hope to empower you to plan actions toward your preferred future.

What is your relationship to the future? Hopeful? Fearful? Excited? Concerned?

What tools do you use today to connect with the future? A calendar? Journaling? Algorithms? Spiritual conversation?

What comes to mind when you hear the word "future" - and why?

LOOK TO THE PAST

Before we think about 10 years into the future, let's first think about the past decade.

We tend to fetishize the future because we love novelty. The future is new, bright, and full of possibilities. Optimism is a good friend of the future; we are taught to be hopeful and optimistic about it. On the other hand, the past is seen as outdated, outlived, and less worth thinking about.

But the past is our greatest teacher. To explore the future is to reflect on the past. We live in the world of both old and new. And as much as things have changed in the last decade, a great deal remains the same. For every novelty you imagine in the future, your past offers you the wisdom to stay realistic and grounded.

LOOK TO YOUR PAST

Situate yourself back in the neighborhood of 2010. Grab a paper and pen to write and/or sketch your thoughts to these questions:

- What were your goals then?

- What were you excited or worried about?

- What were your plans for the next decade?

- What did you think would change but didn't?

Take a moment to read through your answers. What can you learn here for how you orient yourself for the future?

TRENDS VS. CHANGES

Small trends come and go, but big changes may be here to stay.

The impact of the 2020 pandemic will echo through the world for years and decades to come, shaping priorities and directions in our society. But this does not mean all the trends are here to stay. In examining trends of all sizes, we focus our attention on larger patterns of social and behavioral change.

For example, in 2020, many office workers worked from home. Most of them will eventually return to the office when it's safe to do so, but some organizations are so encouraged by their remote work success that they've decided to permanently reduce their real estate. This will have a ripple effect on work life, of course, but also on the entire ecosystem of businesses that support office life as we know it: the restaurants, catering, shops, gyms, and others stationed in or near office campuses.

Some trends can set off a broader chain of events and changes in the world.

How might we maintain some pandemic changes?

What are some of your pre-pandemic habits and routines you've decided you never want to go back to?

Did the pandemic change your long term priorities and goals? If so, how?

In what way did the pandemic alter your relationship to family, friends, co-workers, neighbors, and strangers?

FORESIGHT

POST-PANDEMIC FORESIGHT

Our future is forever altered by the global pandemic of COVID-19.

We are aging everyday. Every minute. But most of us only think about becoming incrementally older on our birthdays, or when we find gray hairs – milestones that jolts us into a momentary awareness of cumulative time.

The pandemic serves as a similar marker in our lives. While we cope with challenges specific to the pandemic itself, we also confront social tensions with deep historical roots. In that sense, COVID-19 was a catalyst for revelation: it highlighted and magnified old problems we neglected to solve for a long time. It's been a wake-up call.

By "post-pandemic," we don't mean "after" the end of the pandemic. There will likely be no clear declaration of its end, even with potent vaccines. Think of 2020 pandemic not as an event with a definitive beginning and end, but a systemic shock with wide-ranging ripple effects across time and space.

To a greater or lesser extent, we are forever changed by COVID-19. We will be living with its impact throughout our lifetime.

What COVID-19 woke us up to:

What have you done during this pandemic that you should have done years ago?

In what way did this pandemic impact the way you think about your own mortality?

Say in 2024 there is a sign of new viral outbreak in the U.S. How do you think you'd respond? Why is it (not) different from 2020?

VARIABLES

Try to think of each foresight with these scales in mind.

Each foresight communicates a simple idea of what the future could look like, but it is by no means complete or exhaustive. When reading through each foresight, try to think of the future with the following scales in mind.

Throughout the booklet, you'll be prompted with these scales, but feel free to apply any of them to any stories for deeper exploration.

TEMPORALITY

How far into the future is this happening? Is it too far or is it already happening? What if the timing were different?

INTENSITY

How marginal or prevalent is this trend? Is it only partially the case for some people, or a reality for everyone?
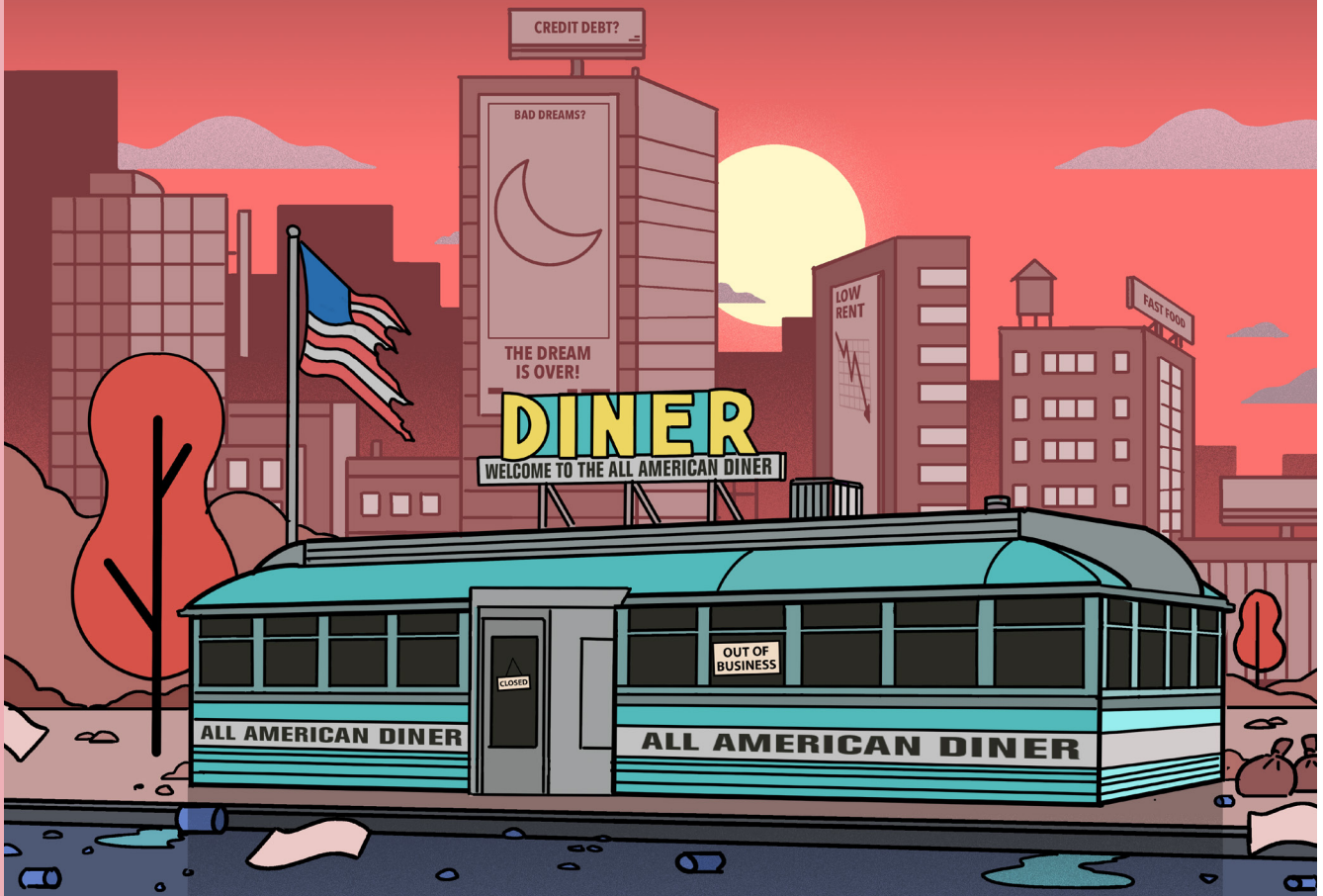
CONTEXT

Where is this happening? How would it play out differently in another context/place?

EMOTION

How do you feel about this? How do you think others would react to this emotionally? Why?

The world no longer expects America's strength and leadership.

Pandemic movies from Hollywood depict the heroism of the American people. The courageous acts of American public officials, military personnel, and average citizens bring a vicious outbreak to a halt, saving billions from falling into a tragic fate.

But the reality looked quite different. During 2020, America struggled to manage the pandemic, reform its healthcare system, support public education, and save millions from the brink of poverty.

In the decade following, other nations have risen to power to take over political, social, and cultural leadership in the world. American college campuses are paying for massive advertising campaigns to win back foreign students, and American passports come with entry restrictions for many countries. There is a massive exodus of immigrants returning to their homeland or fleeing elsewhere to avoid the effects of America's economic and political downfall.

Exercise question:

How do you feel about this story?

How do you think others would react to this emotionally, and why?

What do you wish would happen in the next decade?

Trends to consider:

- Economic recession
- Massive unemployment
- $8 trillion cost of economic recovery
- "America First" policies
- Paris Accord exit
- WHO withdrawal
- Slobalization
- Anti-refugee immigration policy
- Contentious election
- White supremacy
- Wide-spread misinformation
- Police brutality
- Poverty & hunger
- Women out of workforce
- Decline in college enrollment
- Student visa termination
- Post-establishment culture
- Siege of Capitol Hill
- Highest COVID death toll
- Political polarization

NOSTALGIC HINDSIGHT

We miss the good old days that we can no longer go back to.

When do we go back to normal? We repeatedly asked that question during 2020. But there is no "normal" to go back to.

Viral outbreaks are an ordinary part of daily news in the coming decade. Continuous precautions are taken at airports, and travelers must show certificates of health and vaccinations to cross borders and enter buildings.

We are fully in the post-consequential era of climate crisis. Natural disasters such as typhoons, hurricanes, tornados, flooding, and wildfires have claimed many lives, resources, and livelihoods. The collapse of natural habitats has led to more zoonic diseases in this decade than ever before.

Nostalgia is associated with pre-COVID life, but things have never been the same. We are starting to accept that there's no "normal" to go back to. Instead, we must rebuild.

Exercise question:

How long might this be the case?

How might this trend evolve over time?

Trends to consider:

- Appeal of "good old days"
- Unemployment
- "Return to normalcy" rhetoric
- Anti-mask protests
- Political polarization
- Coronasomnia
- High COVID death toll
- Spikes in divorces

- Economic recession
- Massive unemployment
- Climate disasters
- Contentious elections
- Women out of workforce
- Decline in college enrollment
- Collective grief
- Poverty & hunger

STORIES FROM THE FUTURE

Ben & Virginia

February 2032. Bodega Bay, California.

Virginia Walker had always been an early riser; for 78 of her nearly 98 years on earth she had woken at 4:30am. Virginia was used to people thinking this was crazy, but if you never witness the world waking up, you don't know what you are missing. It was her secret, and she was happy to keep it that way. No tires, no horns, no emails pinging - a magical time where no rushing existed. It was how she liked to ease into the day.

The stillness was palpable right before dawn broke, and then the energy shifted, crackled. That's when the dawn chorus began. Listening to the wild birds' collective squawks and chirps never got old for Virginia. She'd once heard that it was mostly male birds trying to prove how strong they were. "Sing loud in the morning and you're a better mate," she murmured to a white-crowned sparrow who landed on a window ledge. She smiled, having known plenty of *people* in her long life who were just like that, too.

As the sun's slow ascent began, like clockwork, her friend - a squirrel named Bob - showed up. Bob liked to sit on the same branch of a cypress tree every day to eat breakfast. *Animals like their routines too*, Virginia thought, pulling a record off a bookshelf. There were so many new-fangled ways to listen to music these days, but Virginia still preferred vinyl - not only because it sounded better, warmer, more lived in, but because of the ritual it offered: taking the LP out of the sleeve, pondering the lyrics. It had the power to stop time for a second. When you're 98, stopping time is your hobby. As the needle found its groove, Virginia sipped coffee from her favourite mug, emblazoned with "*Vote 2032*," followed by the quote "*the only way to correctly predict the future is to pave it, is to brave it.*"

From the record, animal sounds filled the room:

> A croaking splendid poison frog.
> The tap-tapping of an ivory-billed woodpecker.
> The roar of a tiger.
> The buzzing song of a Bachman's warbler.

Some days it made Virginia's heart too heavy to listen to the sounds of extinct animals. Other days, it gave her comfort to remember.

As the glow of the sunrise faded, Virginia whispered to herself "not too shabby." That's what Ben, her husband of 68 years, would always say. Recently, he had taken a turn for the worse. In need of extra care, he currently lived in a Safe Zone - a quarantined part of the city with special care facilities. "But *you're* the young one," Virginia would lovingly say. At 96, it was true; he was the younger one. Bonded for for life, the distance never deterred these two from visiting each other every day.

11 dlab

Virginia tilted her head to the right slightly and a touchless phone sprang to life. Its translucent insides lit up in a circular motion - designed like a rotary phone, a gift from her daughter who had said, "you know, it's like in the olden days." The *click/whir* sound always transported Virginia back to college, when her pockets were heavy with quarters at the pay phone. The calls to Ben went on for hours back then. Today, she made a wave gesture with her hand and the phone began to dial, *click/whir*.

"Where we going today?" Ben's voice filled the room - a rich timbre, the voice of the sort of person who'd hold the door open while doffing his hat.

"How about a day trip to San Francisco? We haven't been to the Castro Theatre in a while," Virginia replied.

"See you there." *Click*. Virginia threw on a coat, primped her hair in a mirror, and grabbed a bag.

At Ben's assisted living facility in the Safe Zone, his nurse Molly had just arrived in her mobile medical "ice cream truck" - that's what Ben called it, anyway. She didn't serve ice cream, though; she had all kinds of other treats to dispense: vaccines, prescription re-fills, algae shakes, even digital pets for the terminally lonely.

She busied herself, propping Ben up in bed, handing him a newspaper with a headline reading "*Upsilon X794.15 officially most transmissible and lethal strain to date.*" Ben sighed and handed the newspaper back, gesturing to a plant pot brimming with herbs. "Plant this edition for me, too? I hear they're embedding sunflower seeds in them this month." Molly sat on the bed, placing a caring hand on Ben's arm. "I know it's frustrating, but the six combo vaccine is going to be here next week, so…."

Ben interrupted. "I know, I know - get that thing into this leathery old arm, stat!"

Molly smiled. "Then you'll be able to really get together, but for now … concentrate on the theatre. What does it look like?"

"I can see the art deco chandelier." Molly fit a silver visor over Ben's eyes.

"What does it smell like?"

Ben inhaled. "Stale smoke and burnt butter." Molly spun her finger in front of the visor and a dial appeared, magnifying Ben's eye: closer, closer, closer.

As his eyeballs dilated, he shut them tight. Darkness. With an exhale, his eyes snapped open.

He was in the The Castro Theatre with its plush velvet red seats, ornate ceiling, and murals depicting gardens and fountains all around. Ben smiled as he shifted his feet on the floor, sticky from years of spilled soda. It was as real as real life - he was *there*. While "Casablanca" played on the huge screen, someone shimmered into being next to him.

"Fancy meeting you here," she said. She was young - maybe 20 - and wearing Virginia's coat. "I thought, as we're visiting our first date, I'd come as me *then*."

It *was* Virginia. "Casablanca, 1954 at the Castro." Ben took her hand. "You were so beautiful, but … I love your wrinkles. Reminds me of all the life we've lived together." Young Virginia lifted her hand and a control panel appeared. She promptly hit 2032 and reverted to her current self.

When they found their seats, she rested her head on Ben's shoulder and they took in the film. The comfort of a timeless, everlasting masterpiece; *films like this will never die*, Ben thought. It was lovely to think that people would see what he was looking at right now for hundreds of years to come. During the movie, they talked about what to have for dinner later - a favourite pastime for years, though now they did it "together apart," as Virginia put it.

"Remember when we cooked our way through every recipe from every cookbook in 2020?" Virginia said. "I'm so glad we got to spend all that time together. That was the bright spot."

"*You must remember this, a kiss is just a kiss, a sigh is just a sigh. The fundamental things apply as time goes by.*"

Suddenly, they were jolted out of their reverie by an image flitting over the film. Sections of the film pixelated, and they heard the murmur of someone else talking. "AR system's acting up; it's almost time to go anyway," Ben said. "One last stop before home?"

They dropped into Yosemite National Park. It was magnificent, but void of animals. An *ADD* prompt flashed in the air and Virginia, with practiced ease, began to orchestrate an influx of animals who popped into existence with her every gesture. In no time, a condor soared overhead. A fringe-toed lizard family scampered by. An ivory-billed woodpecker tapped out a rhythmic melody. A Bachman's warbler then took centre stage.

She was bringing them back - the extinct animals.

Ben and Virginia walked, hand in hand, into this symphony, a Fender's blue butterfly circling their heads. Ben took her hand and they began a slow waltz amidst the throng of virtual life. As they danced, a flickering ghost version of them from the past appeared - young Ben on one knee and young Virginia with hands to her face, "Yes, yes, a thousand times yes!" Time holds important moments under glass. The moment they got engaged will forever spark like electricity.

"See you tomorrow," Ben whispered.

He was back in bed. Molly took off his visor. "Welcome back!" She smiled at his content grin. "So tell me, what's the secret to a long life, a lasting relationship?" She swung Ben's legs off the bed, helping him into a wheelchair. It always surprised him, a little, the way they didn't work in the real world; his body in AR felt more natural, sometimes, as if his mind hadn't caught up to his reality.

He thought for a moment, shifted in his chair. "Listening, reading out loud to each other, and raccoons." Molly laughed. "Virginia loves them." He tilted his head to the right slightly and made a wave gesture with his hand.

At Virginia's house, she took her visor off as her phone *clicked*. A hologram of a raccoon family popped up.

She smiled and whispered, "See you tomorrow."

TOUCHLESS CITY
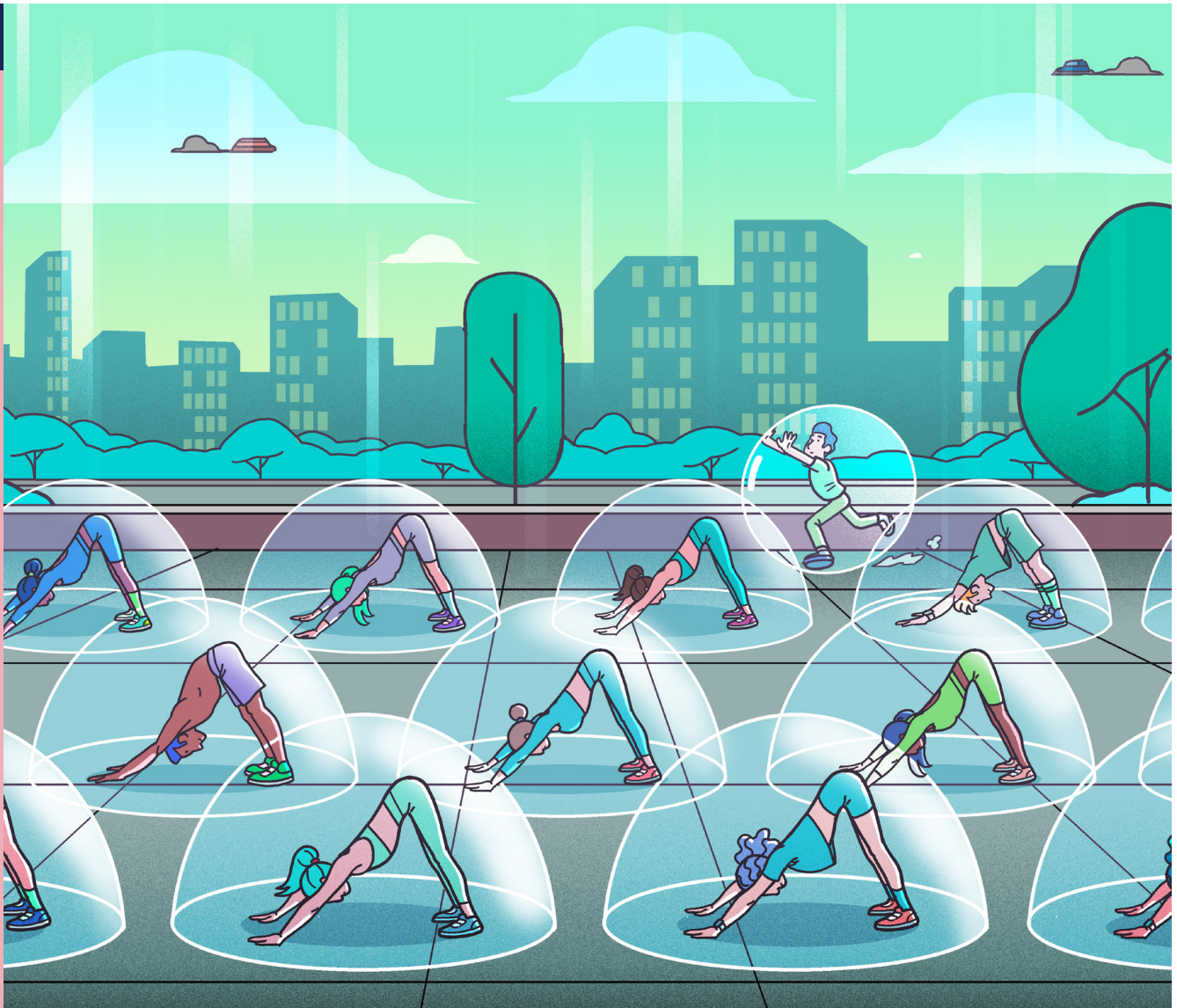
6-feet is a new unit of spatial measurement in urban areas.

Urban spaces and infrastructures are increasingly built to cope with crises of all kinds including wildfires, floods, pandemics, and social unrest. Historical monuments and Capitol buildings are carefully guarded.

Contactless transactions, dark stores, and curbside pickups are staple features of the retail economy, and ordinarily packed spaces such as theaters, gyms, and airplanes are designed with partitions and frequent disinfection for safety. Buildings are fitted with traffic-sensing monitors to aid in the management of people flows. Certifications of vaccination along with proof of immunity for multiple viruses become mandatory for schools, work, and travel. Events and gatherings are planned with precautions – part of life for anyone living in a city.

Exercise question:

How prevalent would this trend be?

Is it marginal, or wide-spread?

Is it an occasional or continuous approach?

Trends to consider:

- Contactless payments
- Dark stores
- Partitioned restaurants
- Slow street initiatives
- Curbside pickups
- Drive-in events
- Virtual theaters
- Virtual museums
- Distance learning
- Safety pods

- Redesigned aircraft
- AR/VR technologies
- Holograms
- Companion robots
- Virtual travel
- Bankruptcies of dept stores
- e-Commerce
- Remote weddings & funerals
- Anti-viral clothing

A 2030 SCI-FI MOVIE

What movie will you be watching in 2030?

Take a moment to review the foresight stories: **Post-America, Nostalgic Hindsight, and Touchless City**. Extending these ideas into the end of this decade, situate yourself in the future - 2030.

It's Friday night, and you decide to go see the latest sci-fi movie in the theater with some friends. You look through the list and find the one you've been interested in seeing.

What sci-fi movie are you watching in 2030?

_____
_____
_____
_____
_____
_____

Jot down a brief synopsis of the movie.

_____
_____
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_____

What does this movie say about the 2020-30 decade?

_____
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TRUST DEFICIT

The government, businesses, news, and technologies are no longer trusted.

One bipartisan trend in 2020 was interest in guns. The concern over public safety and political instability compelled people to purchase firearms for protection; many were first time buyers. Over the decade, gun ownership continued to soar.

The trust reserve has been at an all-time low. The economic recovery has been slow-going, and tangible improvement in each citizen's life has been slower still. Protests of all kinds continued throughout the decade, and each election was animated by misinformation and accusations of fraud.

Those with means have invested in elaborate bunkers to protect themselves from any plague or mob attack. The rest are left to fend for themselves. While there was much hype about technology companies solving some of the most pressing social issues, they have offered little to improve anything.

Exercise question:

Is this limited to specific regions or areas?

Is this limited to specific socioeconomic classes or employment types?

In what ways will this impact the way people plan their futures?

Trends to consider:

- Eroded AI hype
- Anti-trust lawsuits
- Public health struggle
- Disinformation
- Extremism & terrorism
- Privacy & ethics regulation
- Apocalypse bunkers
- Contentious election
- Protests & police brutality

- Eviction & poverty
- Distrust for tech companies
- Rise in gun ownership
- Social media & disinhibition
- Threats against elected officials
- Threats against public health officials
- Quarantine culture
- Vaccine hesitancy
- Economic recession

The pandemic underscored the tension between individual and public interests.

The highly infectious virus forced us to interrogate the notion of private individual rights when harm to one meant harm to many. It also made clear the limits of public institutions and government agencies: they were constantly fighting misinformation when coordination was crucial.

The vaccination progress was slow-going as distrust for public health officials and skepticism for science spread. The long American tradition of individualism and individual autonomy stood firmly in opposition to public health measures.

We are connected in more ways that we can count – socially, physically, culturally, economically, politically, and environmentally. But our connectedness led to vulnerability rather than strength in this decade as we struggled to define how we show up for each other, not just ourselves.

Exercise question:

Where are we most vulnerable together?

How would this play out in another place -similarly or differently? Why?

Trends to consider:

- Disinformation
- Threats against officials
- Lack of CDC response
- Lack of federal coordination
- Lack of international coordination
- Blame rhetoric
- Anti-mask protests
- School closure
- Women leaving workforce
- Unchecked viral spread

- Economic hardship
- Small business closures
- Mass eviction
- Lack of stimulus
- Food insecurity
- Lack of federal mandate
- Vaccine hesitancy
- City & state-wide lockdowns
- Black Lives Matter protests
- Police brutality

Pandemic and other health crises create multiple pandemics.

COVID-19 aggressively – sometimes fatally – interacted with chronic illnesses, compromised immune systems, and undiagnosed conditions of all kinds. Leading up to 2020, the U.S. population already suffered from a high rate of chronic diseases and a critical shortage of routine care, particularly in rural areas. The situation has continued to worsen in this decade.

Even after COVID-19 tapered off, there were concurrent epidemics of diverse health crises. We are facing a syndemic crisis. Undiagnosed cancers, untreated diabetes, heart disease, suicides, homicides, and mental health issues have raged on after COVID. The decline of overall health in the U.S. population has kept the post-pandemic economic recovery slow.

In place of an overburdened healthcare system, more nimble and localized forms of care emerge to provide fast and affordable access to those in need. Working closely with local government, these services respond quickly to the changing needs of the community.

Exercise question:

How do you feel about this story?

How do you think others would react to this emotionally, and why?

What do you wish would happen in the next decade?

Trends to consider:

- Rural healthcare collapse
- Delayed detection & care
- Fear of exposure
- Distrust of medical institutions
- Work visa halt
- Immigration policy
- Epidemics of chronic conditions
- Mental health crisis
- Poverty & hunger
- Natural disasters
- Economic recession
- Death & grief
- Rise in homicides & suicides
- Divorce boom
- Rise in domestic violence
- Coronainsomnia
- Vaccine hesitancy
- Threats against public health officials
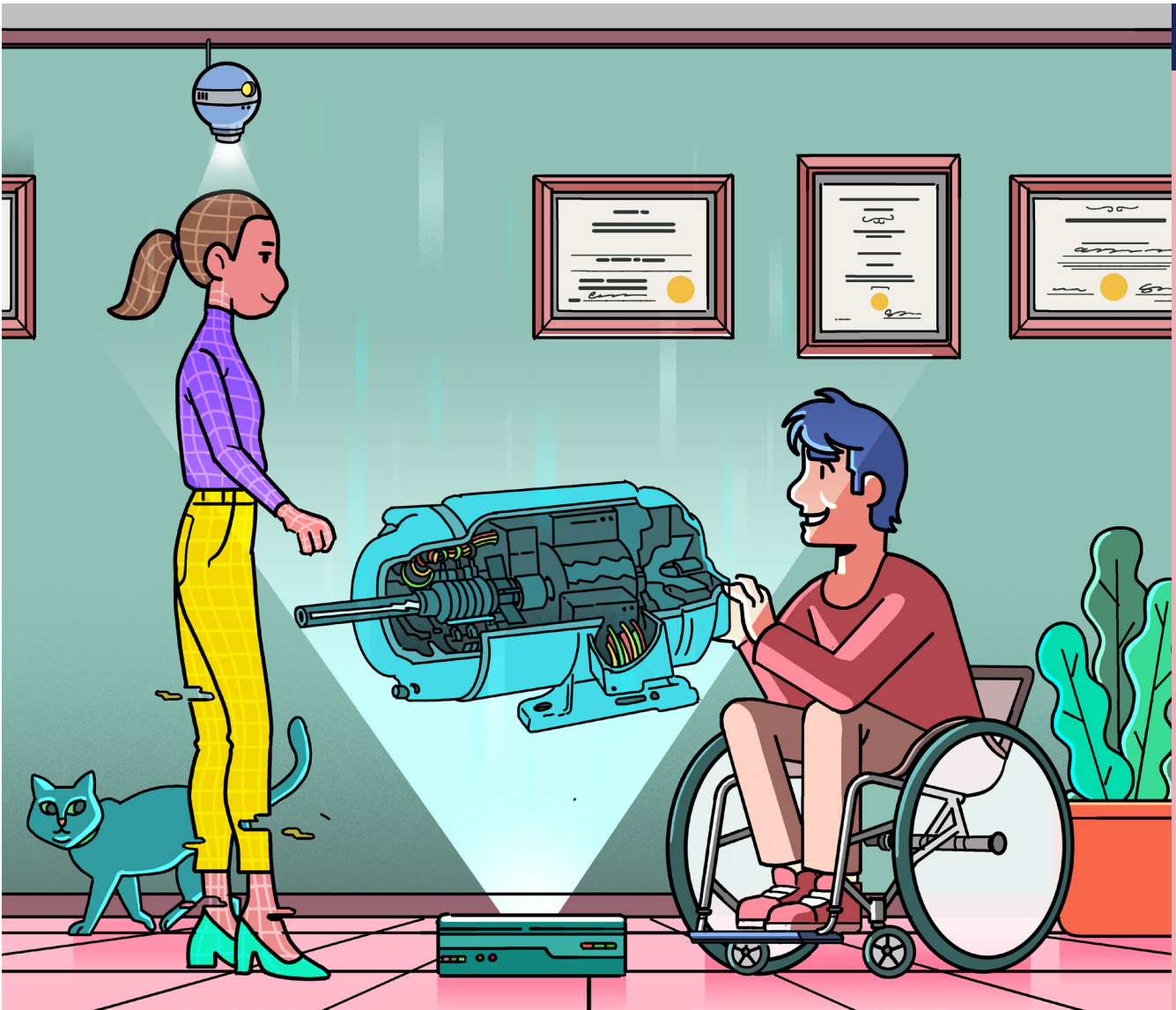
Traditional higher education competes with powerful alternatives.

College enrollment sharply declined throughout the decade. Many students left formal schooling altogether to provide for their families due to economic hardship. The exorbitant cost of college education was out of reach for many. Due to unwelcoming immigration policies, foreign students have stopped coming. A number of major colleges and universities closed permanently.

Job training programs, online courses, and digital means of apprenticeship emerged to fill the gaps for prospective workers. Content immediately applicable to job responsibilities is now available with little cost and commitment.

Digital certification systems allow each student to catalogue her learning, performance, and teachers' recommendations for job applications. Major companies offer remote apprenticeship and online learning modules to train future employees.

Exercise question:

Is this limited to specific regions or areas?

Is this limited to specific socioeconomic classes or employment types?

In what ways can this impact the way people plan their futures?

Trends to consider:

- College enrollment decline
- Unemployment
- Poverty
- Free college movement
- Calls for loan forgiveness
- Youth in workforce
- Hustle economy
- Anti-immigration policies
- Online learning
- Google certification program
- Second career
- AR/VR
- Industry skill gap
- Zoom towns
- Remote work
- Foreign student decline
- Digital education certificates
- Value metrics of work
- IoT
- Job automation

STORIES FROM THE FUTURE

Jack

May 2032. San Francisco, California.

Jack had been looking forward to the field trip for weeks. Today was the day! He excitedly took the audio guide from his teacher and, waving it in front of the other third grade kids, theatrically pressed play.

A small, fluffy, half bird, half fennec fox creature appeared on his shoulder. "Hi, I'm Widget - welcome to the Museum of Lost Things! Established in 2026, with a generous donation from the late, great biologist Sir David Attenborough, we first focused only on extinct animals. Now, our mission has grown to include much more! I'll be your interactive guide, so ask any questions you have! Ready?" Jack gave a thumbs up. "Then follow me."

Jack and his friends, all with their own adorable Widgets, moved as one, like a murmuration of starlings. "First stop, one of the original exhibits." Jack and his friends peered at a cliffside built into the wall of the museum. An animatronic bird, a gannet to be exact, squawked at them. The only moving creature in the diorama, it was surrounded by a crowd of static, concrete gannets.

"Poor, lonely, Nigel the gannet. Conservationists placed hundreds of fake gannets on Mana Island, in New Zealand, in an effort to attract real ones who hadn't been seen there in over 40 years. Only one showed up: Nigel. He spent his life wooing a cement mate, trying to impress her with nests made from seaweed and mud - a doomed, one-sided love affair. The gannets are lost to Mana island now, but thankfully thriving in other parts of the globe."

"Poor Nigel," Jack muttered, and his Widget virtually nuzzled its fluffy face into his neck in an attempt to cheer him up.

"Next stop, the 'Spontaneity Simulator.' Choose a scenario and see if you can be spontaneous!" Blank stares all around from the kids. Widget pulled up the dictionary definition of spontaneous, and Jack read:

Spon-tey-nee-uhs. Unplanned. The act of doing something without having to think it through before.

Born in 2024, spontaneity was lost to Jack. Wearing a mask was second nature, and having to think five steps ahead was just the way it was. He watched as his teacher built a scenario off the spontaneous prompt: "*Let's grab a drink after work.*" His teacher dropped into a 3D environment where she ate dinner, inside a packed restaurant, with ten coworkers. She clinked a glass, hollered "Cheers!" - not a care in the world.

Jack thought about all the steps he'd heard his mom go through to plan a night out: *make sure there is outdoor seating, ask about mask policy, will everyone attending be testing before?*

A knot in his stomach tightened. Is this what his parents were talking about when they said the pandemic had "robbed him of something wonderful?" It was going to be ok, though because his mom said "kids are resilient." She told him that if the world ended up under water, kids would adapt - grow gills so they could breathe. Jack had tried to grow gills a few times in the bath at night, but so far, no luck.

"Next up, the diorama hall." The kids looked in awe at the cavernous room, the museum's equivalent of a Natural History exhibit - things lost forever captured, like flies in amber, behind glass. Depictions of people and things technology made extinct:

A travel agent

Rainforest

High heels

Handshakes

Buffets

A shoe repair store.

Jack stopped in front of the shoe store diorama: a small, cluttered space, housing every kind of shoe, and an elderly man with a hammer. "What's *he* doing?" Jack asked Widget.

"He's fixing a shoe. When people's shoes got worn down, they could extend their life by having someone fix them, giving them new soles. These were usually family run businesses that had been handed down through generations. When people started working from home, shoes became slippers or casual shoes that just got thrown away when they were worn out." Jack suddenly felt sad as he watched the sweet old man hammering away - he hadn't realized that shoes had *souls*. He looked down at his own scuffed sneakers, vowing that from this moment on he would take better care of them.

The next diorama depicted a group of friends in a restaurant setting doing something Widget called "attempting to split the check. You see," he continued, "back then they used something called 'cash' - a physical sort of money. Now, of course, this archaic custom has been lost." The kids watched, slack jawed, as the diners engaged in a surreal conversation: "What are you leaving as tip?"

"Just give me the cash instead."

"I'll owe you 11 bucks."

Widget explained: "Some people feel nostalgic for this

interaction: the awkward chaos that could uncover character flaws. They even missed being able to be mad at that one annoying friend who, it was found later in the evening, hadn't put in enough tip - there was always one."

They left the diorama hall, passing by a replica of a cinema that showed what life was like when people went to a space other than their living rooms to watch a film. Jack knew his parents missed this - they would sigh and say "It wasn't just about the film, it was the shared experience," and "There's nothing like seeing it on a big screen." Jack didn't really understand this, and the recreation, with a narrator saying "people would eat popcorn loudly and sometimes talk back at the screen" didn't do much to change his mind. He did know there were a few cinemas left, places that played old films, a lot in black and white. His dad said he'd be interested one day, and that he could have his "DVD collection, too" - whatever that was.

Heading into the Lost Environments wing, Jack noticed a "*Venice, Above the Waters*" exhibit under construction. But the main exhibit was "So Long, Single Use Plastic." The room consisted of a giant water tank that one second was full of plastic water bottles, straws and other debris, then shifted, the plastic disappearing as ocean life took its rightful place in clear blue water.

It was hypnotic. Widget said "Since the ban of single use plastic in 2028 and the invention of a biodegradable plastic made from prawn shells, the ocean could breathe once again." A projection of a teenage girl appeared with the caption "17 year old Angelina Aurora invented prawn plastic." *Wow, she's not that much older than me*, Jack thought. As the plastic in the tank returned, he read aloud the slogan printed on the hundreds of plastic bags floating: *thank you and have a nice day*.

Jack, so mesmerized by the changing waterscape and the thought that someone at 17 could make such a difference in the world, hasn't noticed his group had moved on. When he did, he panicked, pressing buttons on the audio guide for help. This seemed to confuse his furry A.I., and Widget shimmered and disappeared.

Jack scanned the room looking for a mom with kids - something *his* mom always told him to do if he ever needed help. He spotted a lady with a stroller and hurried over, awkwardly explaining what happened.

"Lost in the Museum of Lost Things," the mom said, smiling. "They'll put *you* behind glass if you're not careful."

They found his group at the Lost Social Skills exhibit and he rushed to join the other kids without a backward glance or thank you. She understood, though; the giant ball pit here was every kid's dream, something every kid *ought* to run towards without looking back. It was here people remembered how to play, how to talk to each other. She looked down at her baby, now asleep - how would it be for her? She remembered when she was young, a time her parents dropped her at a ball pit in IKEA. It was almost impossible to imagine her daughter doing what she'd done: burying herself in balls with a shrieking crowd of other kids and their germs while her folks shopped for a flat-packed Malm bed frame on Aisle 17B.

Without his Widget, Jack listened in on a friend's A.I., an otter/hedgehog hybrid. It told them that after each play session, the ball pit was sanitized. They watched as a cascading beam of cleaning light scanned the pit. Jack was one of the kids admitted into the pit next, along with a group of people, some strangers, some classmates from his school. Ice-breaker prompts flashed on the walls, with the instructions: "Stuck? Try using one of these to start a conversation!" Jack threw himself into the balls, his huge smile slowly disappearing beneath them.

Later, before they headed home, Jack and his class exited through the gift shop. The gift shop here wasn't like most - everything was free. At the museum, visitors brought things to leave at the gift store for other visitors to take. Others were fully paid for by advertisers - no cost to "buy" the items. Jack spotted a scarf he thought his mom would like. He scanned the QR code with a wand, and it told him personal details about the previous owner:

This scarf belonged to Virgina Walker. During the pandemic, she picked up knitting again after a 40 year break. She wasn't very good, at first, but even though she knitted what would be considered much better scarves later, this one, bumpy with dropped stitches, was her favourite. Maybe because she wore it every night when her and her husband Ben would sit outside, listening to the banging of pots and pans to thank essential workers, while sipping on hot chocolate. It has danced under the stars in Joshua Tree. It has known true love. It even holds the scent of their beloved dog, Daisy.

Jack inhaled - it did have a faint smell, warm and a bit musty, like a wet rug.

It had been a perfect day, except for losing Widget. He couldn't wait to tell his mom he'd changed his mind about what he wanted to be when he grew up. He didn't want to be a ninja after all; he was going to be a biologist! He was going to save Nigels
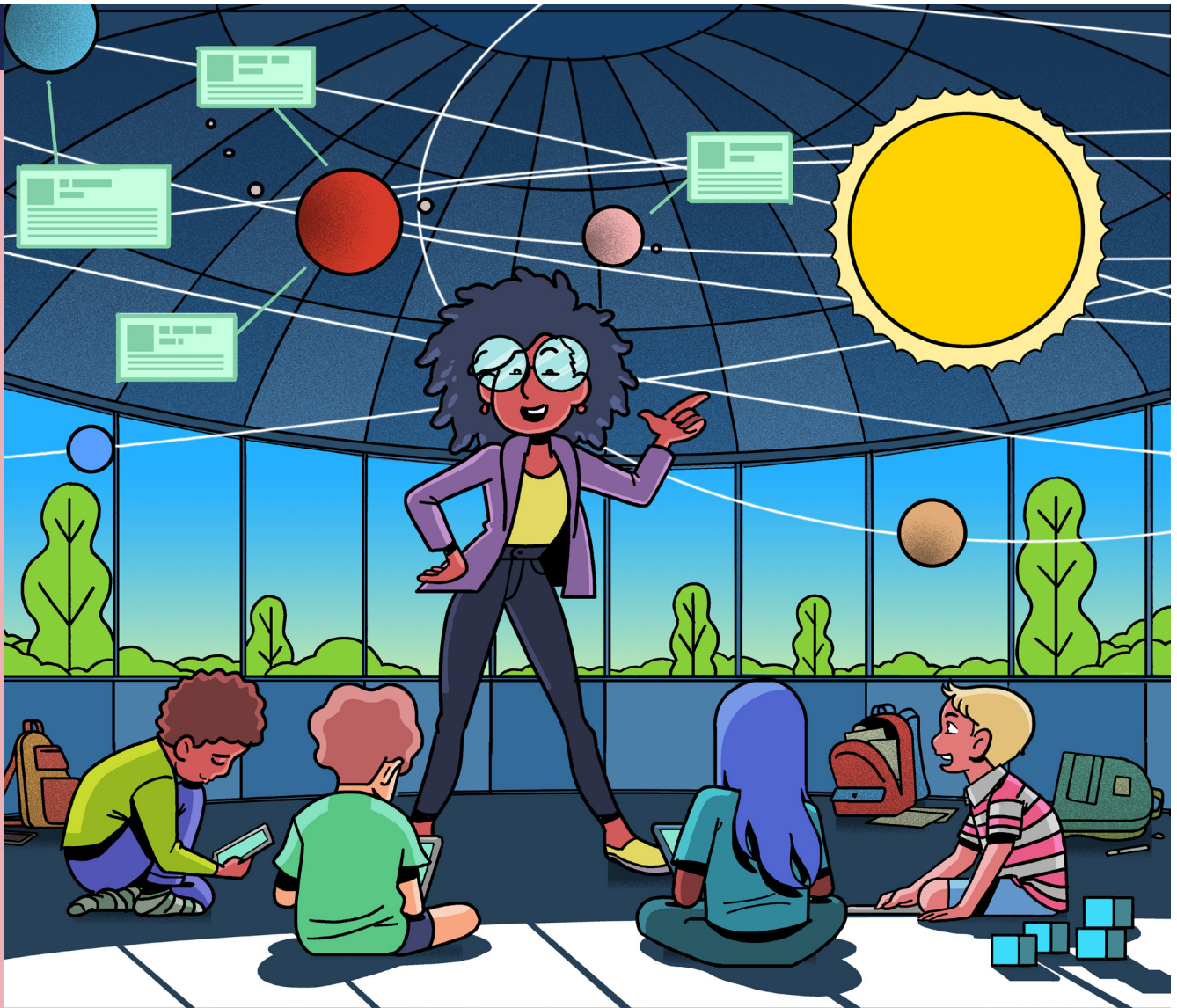
and the environment. As he picked up the scarf, there was a chirp from underneath it and Widget popped back into existence. Jack smiled.

Widget said what he always says at the end of every tour:

"*Thank you and have a nice day.*"

Our experiences are mediated by physical and virtual means.

Opera houses around the country offer virtual shows online. National parks are only open virtually for several weeks a year. There are aquariums, theaters, and museums that exclusively accept online visitors.

Virtual weddings and funerals are commonplace practices now, and universities allow at least one semester a year to be completed entirely online.

The legacy of in-person interaction is replaced by playful exploration of digital-physical hybridity. The virtual space is no longer a poor substitute for physical experience. Rather, digital platforms offer a new portfolio of possibilities and accessibilities that physical means cannot. AR and VR technologies and robotics provide new ways to merge physical and digital experiences, allowing people to transcend time and space like never before.

Exercise question:

If this were only limited to certain areas of life, what would it look like?

If this were expanded to all areas of life, what possibilities are there?

Trends to consider:

- Virtual theaters
- Virtual museums
- AR/VR technologies
- Implantable technologies
- Robot companions
- Digital avatars
- Hologram
- Distance learning
- IoT
- Online conventions

- Intimate technologies
- VR theme parks
- Hybrid artwork
- Livestreaming
- Virtual field trips
- Smart glasses
- Virtual factory shifts
- Automated retail
- Digital celebrities
- Virtual weddings & funerals

A selective group is chosen to be your survival team.

Much of the institutional support for our lives was put on hold during the pandemic. Schools closed, leaving hungry children at home. Work became online, leaving adults to care for families while working. Financial support for the unemployed was scarce to say the least.

Social connections and relationships offered both solace and serious risks. People have developed creative ways to implement closed "pods" and "teams" of people deemed safe, and lived, worked, studied, and supported each other in those communities.

The relationships and rituals built in those safety pods continue to grow in strength and commitment over the decade. They serve as a powerful coalition in time of crisis – not just in pandemics, but in all kinds of disasters and social unrest – effectively forming a survival team.

Exercise question:

How long might this be the case?

How might this trend evolve over time?

Trends to consider:

- Quaran-teaming
- Safety pods
- Learning pods
- Loneliness
- Virtual events
- Trust deficit
- Apocalypse economy
- Alternative currency
- Resilient community
- Deglobalization

- Volunteer armies
- DIY
- Wealth stigmatization
- Buy nothing movement
- Luxury bunkers
- Divisive politics
- Anti-mask protests
- Vaccine hesitancy
- Mental health crisis
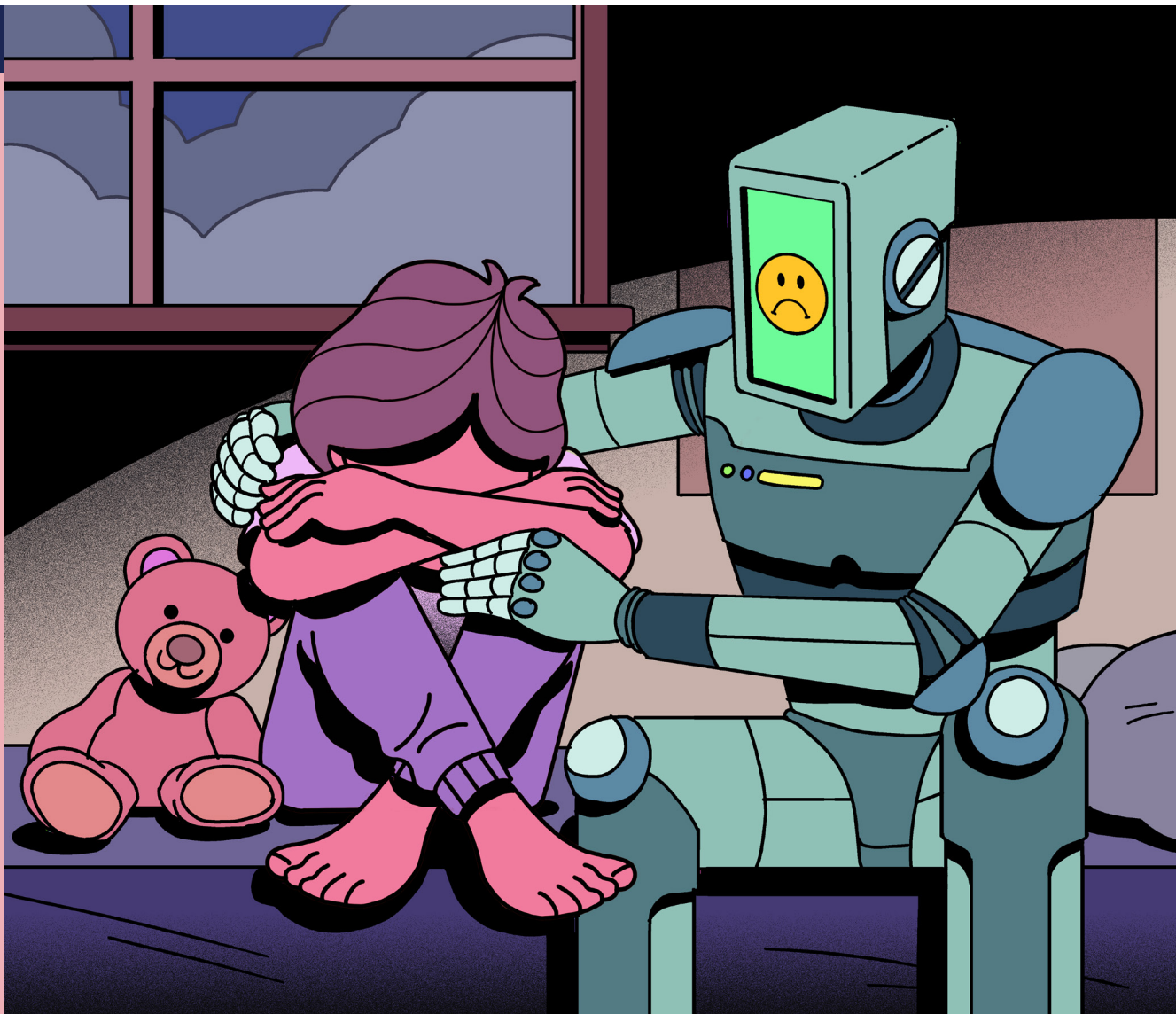
AI is built for a dignified and harmonious relationship with humans.

A story of humanity fighting against the artificial robotic army is an outdated tale of science fiction. AI is now designed to compliment, assist, and augment humans and human capabilities. We live in a dignified harmony with each other, by design.

AI empowers humans to see and hear beyond our natural faculties, think more deeply and creatively, and empathize with each other more powerfully. Instead of replacing or exceeding humans, AI becomes an extended part of humans - an integral and dignified part of systemic social transformation. Humans and AIs together set the stage for a more peaceful society.

AI innovation is an ultimate exercise of interdisciplinary exploration. Experts in data science, engineering, philosophy, humanities, and social science work closely with elected officials to guide ethical and dignified use cases for emerging AI technologies.

Exercise question:

How do you feel about this story?

How do you think others would react to this emotionally, and why?

What do you wish would happen in the next decade?

Trends to consider:

- Ethics principles
- Ethics audit
- Privacy regulation
- Distrust for tech companies
- Anti-trust lawsuits
- Data dividends
- Human-centered design
- Citizens as beneficiaries
- Weaponized data
- Outdated notion of "user"
- Implantable technologies
- Nano technologies
- Cobots
- Job automation
- Trust deficit
- Machine learning
- Technology & equity

YOUR BIRTHDAY IN 2030

How will you plan your birthday party in 2030?

Take a moment to review the foresight stories: **Immersive Hybridity**, **Safety Pods**, and **Dignified AI**. Extending these ideas into the end of this decade, situate yourself in the future - 2030.
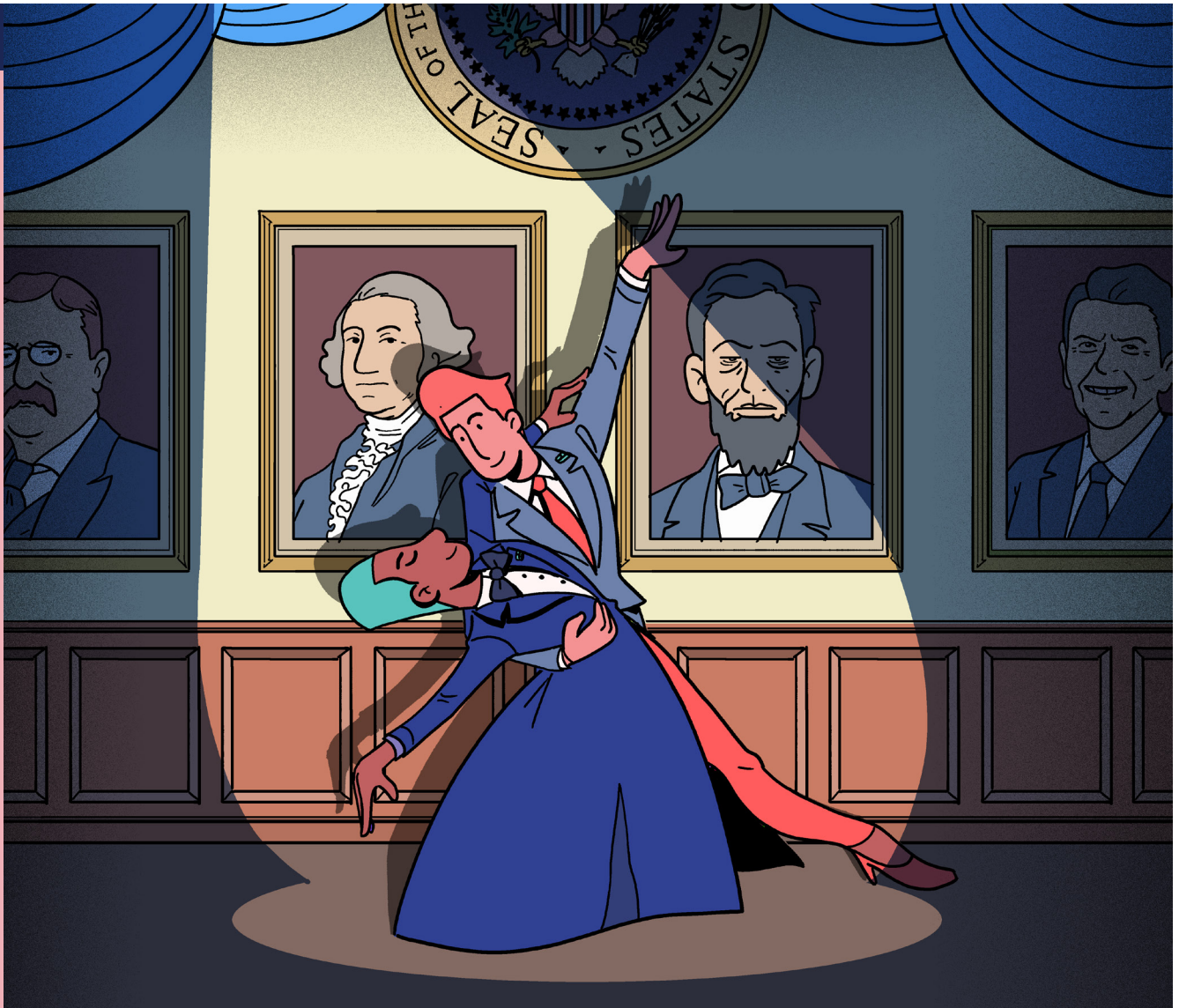
Your birthday is coming up, and you'd love to celebrate in a special way. Based on these foresight stories, imagine what the celebration is like.

What's the party like?
What food? What location?
What activities? Sketch out your party invitation blow.

Gen Z emerges in positions of power to rebuild the broken system.

A 30-year-old in 2030 has lived through a seemingly endless cascade of crises in America. The first true digital native generation has advocated for social progress and leveraged digital platforms to support various causes with passionate interest.

By far the most diverse generation to step into positions of power and influence, Gen Z continues to stay resolute on rebuilding the social structure and economy of the U.S. The notion of the majority has shifted during their leadership, tipping the scale of representation indefinitely.

Rejecting the traditional hierarchy and racial power dynamic, the new generation of leaders pushes for equalizing economic and educational standing for all. Through innovative and effective use of technologies and movement, these leaders harness powerful momentum to repair the broken social system, climate collapse, and economic and racial injustice.

Exercise question:

Is this limited to specific regions or areas?

Is this limited to specific socioeconomic classes or groups?

In what ways will this impact the way people plan their futures?

Trends to consider:

- Gen Z
- Climate activism
- Anti-gun advocacy
- Clean water activism
- Youth voter turnout
- Advocacy for gun regulation
- Stigmatizing wealth
- Social influence

- Anti-war ideology
- Anti-capitalism
- Microcelebrities
- Livestreaming
- Digital influencers
- AR/VR technologies
- Racial injustice
- Gaming political events

Work is redefined based on value of contribution.

There is a renewed wave of respect and recognition for "essential work" in our society. As many organizations shifted from in-person to working from home, they reassessed what makes work essential or valuable within their environment.

Instead of tallying work hours and attendance, businesses implement performance measures focused on value each person is adding to the organization during this tough decade. Inspiring collaboration, teaching others new skills, creating new partnerships, and similar contributions are recognized as value additive work. Focusing on the numbers of hours spent or reports written has become irrelevant. This transforms the structure of power and influence in organizations, dismantling the old framework.

Exercise question:

How do you feel about this story?

How do you think others would react to this emotionally, and why?

What do you wish would happen in the next decade?

Trends to consider:

- Working from home
- Digital engagement
- Worker burnout
- Hustle economy
- Deglobalization
- Creative leadership
- Sacred design
- Commodification
- Automated retail

- Virtual factory shifts
- Peer-to-peer platforms
- Retire Early movement
- Iternative currency
- Experience economy
- Solution economy
- Generalized specialists
- Human centered design
- Organizational inefficiency

STORIES FROM THE FUTURE

Sophia

June 2032. San Francisco, California.

Sophia liked waking up to music *(Prescribed Sept 2031: music therapy)*. Her alarm was set to the oldies station, which played hits from the late 90's and early aughts. Today, a Dee-Lite tune roused her.

As she sat up in bed, she couldn't help but sing along: "Groove is in the heart-art-art-art." She caught herself in the mirror and asked her reflection: "Who are you?" It was impossible to imagine that just shy of a year ago, she woke with a sense of dread and a seeping panic at the thought of facing the day.

The days, oh the days. They had started to feel like they were scored with a rising crescendo - never-ending news cycles, war, social media likes, not enough likes, clickbait this, life hack that, scrolling, swiping. It was a barrage. She felt overwhelmed. It got so bad she took a leave of absence from her job at the library, *and she loved her job at the library*. She simply couldn't cope, even when someone had a simple request. But now, here she was, smiling and singing before she'd even had a cup of coffee.

This seismic shift was not due to the doctor she had seen while at her lowest; all he'd done was tell her the obvious: she had anxiety. That night, at home, with her loneliness for company, the walls started to close in. She thought back to what the doctor had said. *You're* just *anxious*. Had he said "just?" Even if he hadn't, damage was done with his dismissive tone.

Sophia had laid on the floor. She had learned this was the best thing to do when a panic attack came on. There was a booming in her ears, and a thick blackness engulfed her - she held onto a tiny pin-prick of light with all her might. If she lost that light, she felt she might not make it back.

After that night, she switched to a different type of healthcare, an app called *Chooselyf*, in which a digital doctor gave her health recommendations throughout the day. She felt funny about it at first, that it wasn't a *real* person, but … it had been great so far and, most importantly, she never once felt dismissed or unseen.

Sophia got up and headed to her BlissBox: a swirling, hypnotic A.I. artwork that brought her bedroom wall to life *(Prescribed October 2031: whole body wellness)*. Its fluid colors shifted, connecting to Sophia's subtle movements, tone of voice, and vital data. It read her anxiety levels, knew what she needed and what to avoid to keep her mood in balance. Its data was automatically downloaded to her *Chooselyf* app and recommendations were offered to Sophia in her mother's voice. She'd customized it that way.

"Your Blissbox detected some anxiety in the night in the form of a classic falling dream. Skip caffeine this morning," her "mom" said. Hearing that familiar voice was comforting - it made her feel

less lonely.

Loneliness had taken up residence with Sophia as a teenager - it was also when her "just" anxiety had moved in. She had been 15 in 2020. Her high school life was on zoom, her friends were little black boxes. She was supposed to be hanging out, going to the mall, and making bad decisions, but she had been denied these typical high school experiences by the pandemic.

Her first real crush, a boy who used to smile at her in the cafeteria, became a black box too. Then, without notice, he was gone - trying to outwit Covid, his family had moved to Canada. She'd never got the chance to share her feelings with him - to share that rite of passage, the awkward slow dance to Spandau Ballet's "True" at prom. The painful memory causes her Blissbox to swirl and hum erratically. *Maybe that was why intimacy had become such a stranger*, Sophia thought.

A voice from another room interrupted her thoughts, gentle and reassuring: "Hey. Did you sleep ok?"

Sophia smiled. Her difficulties with intimacy were behind her - she had Milo now. "Good, outside of another falling dream." As she got dressed, her Blissbox swirled and pulsed, picking up on the quickened heartbeat from the exchange with Milo. He had come into her life just at the right time - just when she needed someone the most.

He always knew what she needed. "I'll fill your dinner prescription while you get ready for work, sound good?" *Get ready for work?* She smiled again - that *did* sound good. She'd just started back this week, and things were going well.

In the kitchen, Sophia popped one contact lens in and her personal, digital world sprang to life. Text was projected onto the wall, and with a blink, a hologram keyboard appeared in front of her fingers on the table. All her recommendations for the day come flooding in - her life was predetermined, which was what she needed right now to get back out there. It made her feel safe - able to cope.

Breakfast, per "no caffeine recommendation," was tea, with its mood-altering magic. As she sipped, she also bit the cup, made of protein-enriched wheat biscuit, healthy and - when she took the last bite - good for the environment. She made anti-depressant scrambled eggs on her electric stove (gas had been banned since 2030), accompanied with herbs from her floor-to-ceiling hydroponic wall. An abandoned library ladder from work helped her reach the highest spots.

She treated herself to a sliced avocado on the side. They were hard to come by these days, even in California. Climate change meant they had to be grown indoors, and at $20 a pop, they were a delicacy, but today, she decided, "I'm worth it." Besides, this wasn't all just for her mental health, but her physical, too - there was talk of an imminent fungal epidemic, like in the old zombie flicks. With a warmer, wetter, climate and a higher load of mold spores, it was a serious possibility. She had to eat to keep herself strong.

Sophia yelled to Milo that she'd be late if she walked the dog *(Prescribed January 2032: dogs lower stress hormone cortisol).* Simone, her mutt, came running at the magic "w" word. There was a time when landlords posted NO DOGS ALLOWED, but in Sophia's apartment complex it was mandatory to have a dog. DOG LOVERS ONLY must apply. The whole complex was built around a central dog park. If you didn't have time to walk your furry friend, someone else in the building would. Sophia pressed a button to alert the building's residents.

Rushing to the door, she blew a kiss towards the living room - "have a great day, see you tonight," Milo called. Sophia ran into her neighbor, Harsha, leash in hand, in the hallway - already there to walk Simone. She thanked him and was off.

The library was mostly digital, but Sophia made sure to walk through the physical book section to get to her desk even though it was the long way. She loved running her fingers over the vast aisles of books, sometimes even stopping to surreptitiously sniff one of the older ones, its vanilla scent evoking all the stories it held and people it once belonged to. One of Sophia's jobs was to locate first editions; another was working in conjunction with The Museum of Lost Things to research the history of objects for their gift shop project. Now though, as she settled into her workspace high above in the library's dome, she had a new task.

Sophia dunked an old Samsung 21 series phone into a sink filled with chemicals and slowly an image - a photo of a person, once unwanted - re-appeared. These people - photobombers, innocent bystanders - had been erased with photo-editing software, but Sophia was bringing them back. She would research who they were and their stories would be placed in the archives.

Why would anyone want to erase "George Davidson, a man who always made sure the feral cat family living under his deck never went hungry," or "Sarika Ray, a single mother who enjoyed tap dancing in the very little spare time she had?" Sophia got so immersed in her work she was often surprised when the chime above her desk rang to announce lunchtime. With a blink, she pulled up her hologram keyboard and texted Milo:

Time flies here. It's lunchtime already. I'll be off grid for next hour x

Sophia always took a full hour for lunch *(Prescribed March 2032: assists productivity, relieves stress)* and unplugged from technology for the duration *(Prescribed April 2032: reflect and recharge)*. She liked to eat at Pen and Paper, one of the cafes the library had to offer. Here you were given a choice of stationary and encouraged to write a letter to a loved one. Sure, there were so many modes of communication available, but none so personal as getting a letter in the mail - a letter meant *I was really thinking of you*.

At Pen and Paper's hostess stand, Sophia held her eye open and and dropped her contact lens into a tube, to be retrieved once lunch was over. As she ate - the meal chosen based on scans of her microbiome - she clicked a pen. *Who to write to today?* She'd recently written to her mom and to Milo, so … she started writing.

> *Dear Future Sophia,*
>
> *It's 2037 now and guess what? You're happy, calm, and loved deeply by your partner. You laugh often, sometimes fight, but never go to sleep without talking it out. You're trying to start a family - it's going to happen. Soon you will be three.*
>
> *Love,*
>
> *Sophia 2032*

She wrote her address and added "To be opened in 2037" on the envelope, then dropped it in a mail box as she exited the cafe.

When Sophia re-connected, a slew of messages appeared: *how was lunch?/prescription is in for dinner, just swing by the grocery store on your way home/can't wait to see you!* At work day's end, Sophia checked out a compendium of Brothers Grimm fairytales; a robot librarian scanned it and handed it back. Its gold embossed cover depicted a long-haired maiden kissing a knight. She would read it to Milo later; they enjoyed reading to each other *(Prescribed November 2031: strengthen relationship by encouraging vulnerability)*.

On her way home, Sophia stopped at the local grocery store for her prescription: antioxidant cheese, probiotic fonio, an anti-inflammatory maitake mushroom medley, and anti-depressant wine. She passed her local cinema - a rarity these days, it had opened recently and only played old movies. She saw one of her favourites from 2022 was playing soon: "Everything Everywhere All At Once." The talking rocks had made her cry when she'd first seen it. She now realized the film had touched a deep chord in her because without saying it, it treated depression as an inevitable part of life. She wanted to take Milo to see it this coming Saturday. Maybe she wouldn't even feel shy crying in front of him.

"I'm home," Sophia announced as she entered her apartment. She was immediately greeted by Simone and a "welcome back," from Milo. As she headed towards his voice, her mother's voice said "*intimacy prescription fulfilled for today*."

In the living room, Sophia clicked a flashing cursor on her laptop, plussing more hours into the app. Milo sprang back to life *(Prescribed August 2031: MILO/**M**athematically **I**ntimate **L**oving **O**ther)*.

"How was your day?" Milo asked.

Sophia smiled. "So much better with you in it." She told him about her day, the people she'd uncovered, the movie they'd see Saturday and the letter she would open in the future, and how he was helping her get to where she wanted to be.

GROWN TO ORDER

Products are grown to meet your needs and requirements.

Your bandaids are grown to order, engineered to help your specific skin heal fast with bacteria naturally present on your skin. Your cosmetics, food, and medicine have properties derived from living things - fungi, life-sustaining bacterium and live cells, like your own.

The combination of material science, pharmaceutical science, microbiology, and personal nutrition culminates in innovations in custom-grown products and food. The genetic mapping of consumers is used to engineer highly personalized live materials optimized for consumers' physical and mental fitness.

Custom-grown products become widely used in healthcare to minimize complications and unwanted effects of medical interventions. They play a critical role in the treatment and recovery process of patients suffering from novel viral infections.

Exercise question:

If this were only limited to certain areas of life, what would it look like?

If this were expanded to all areas of life, what possibilities are there?

Trends to consider:

- DNA-based food
- Fungi-based products
- Bacteria-based material
- Alternative leather
- Anti-viral materials
- Anti-viral clothing
- CRISPR
- Hydroponics
- DIY

- Smart indoor garden
- Hands-free farming
- Vertical farming
- Community gardens
- Smart agriculture
- Automation
- Growing production
- Glocalization
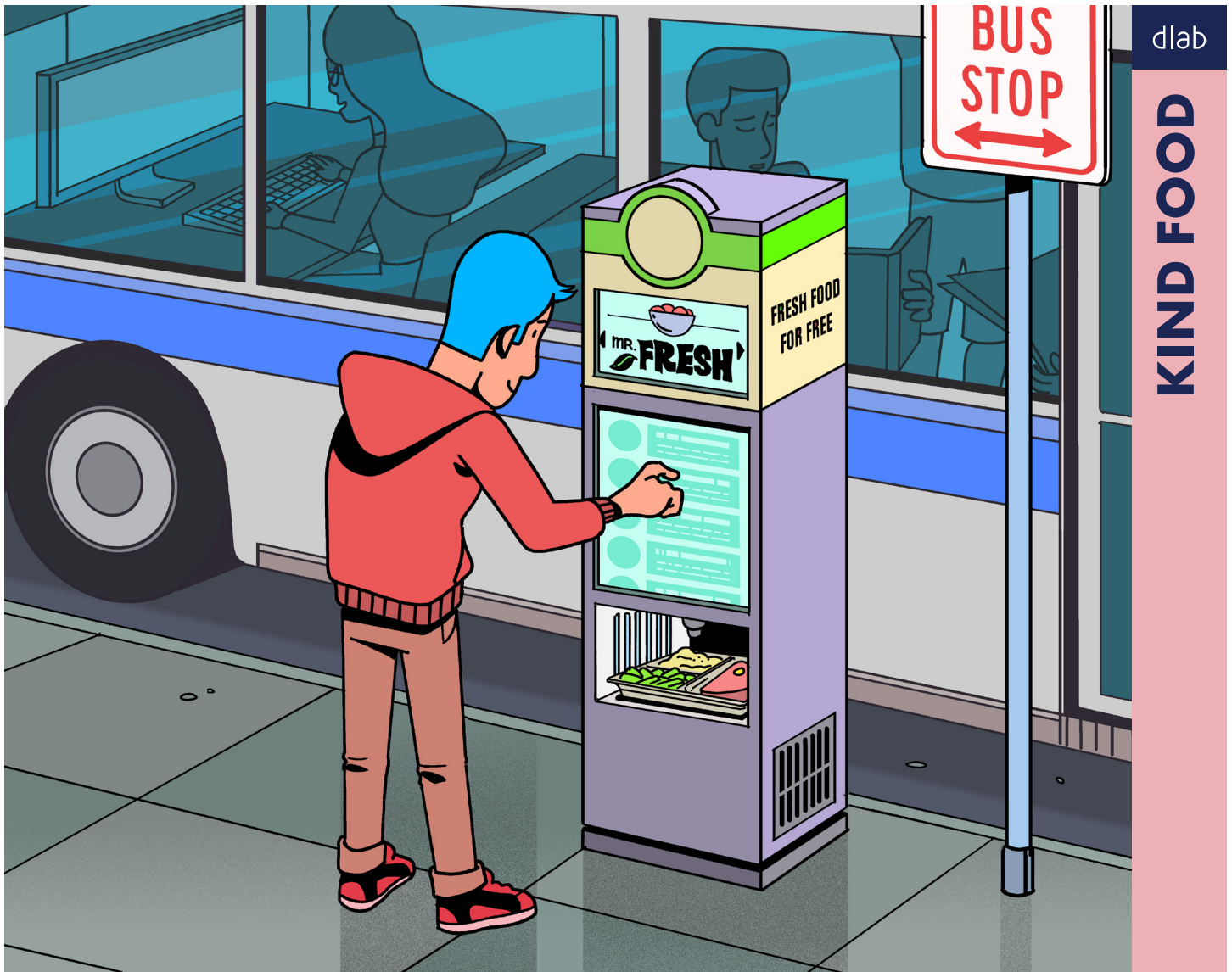
Food is locally and sustainably made and optimized for our well-being.

Be sure to bring your food prescription to your grocery store. Wines, yogurt, juice, and cereal are all personalized based on your genetic profile to optimize your health and to help prevent conditions you're susceptible for.

Your local grocery stores are growing their produce on their roof. All food waste is collected for composting and sustainable processing. The energy generated from waste processing is redistributed to the local community to power traffic and street lights.

The butcher expertly handles lab-grown meat; manual meat processing is a relic of the past. The meat and alternative proteins engineered in labs offer highly optimized nutrition in an era of food insecurity. The production process is entirely automated, making it far safer than traditional production against viral outbreaks.

Exercise question:

How long might this be the case?

How might this trend evolve over time?

Trends to consider:

- Alternative protein
- Plant-based "meat"
- Risks of meat processing
- Collapse of supply chain
- DNA-based food
- Hands-free farming
- Nano technology
- CRISPR
- Pharmaceutical food
- 3D printed food

- Zero carbon restaurant
- DIY movement
- Gardening
- Vertical farming
- Urban faming
- Edible insects
- Food waste mgmt.
- Circular economy
- Microbiome research
- Bacteria & fungi as medicine

The world is becoming less globalized, not more.

New zoonotic diseases have continued to pop up across the world, and leaders have developed a coordinated response to prevent these viruses from widely spreading. Most countries are yet to fully recover from the economic downfall caused by COVID-19.

With robotics and automation, businesses have fortified their operational flexibility and resilience and adapted to this reality. The supply chain has been simplified and localized as much as possible, and partnerships are dynamically managed to avoid viral hotspots from affecting business.

World travel remains less popular than it was prior to 2020. Work is largely conducted in a hybrid of in-person and digital means. Rural economies are energized by young adults who moved back home during the pandemic recession. Sustainable production that helps preserve natural habitats for organisms has gained traction and support.

Exercise question:

If this were only limited to certain areas of life, what would it look like?

If this were expanded to all areas of life, what possibilities are there?

Trends to consider:

- Domesticating manufacturing
- Supply chain collapse
- Flexible & resilient manufacturing •
Circular economy
- Slobalization
- "America First" policies
- Nationalism
- Sustainable production
- Circular economy
- Mass customization

- Grown-to-order
- Automation
- 3D-printing
- Hands free farming
- RaaS
- Alternative materials
- Automated retail
- Virtual factory shifts
- Glocalization
- IIoT

dlab

Local leaders build coalitions to fill the leadership void.

Viral hotpots, poverty, homelessness, and health crises bubble up across the country, but federal leadership continues to struggle in mobilizing resources to meet those needs. The center of political gravity becomes more localized at the community level. State officials, mayors, community leaders, and local programs rise up to govern and protect.

Micro-economies emerge to close gaps left by mainstream means of exchange. Neighbors exchange goods and services without money. School districts operate massive food pantries for the hungry and provide much needed assistance in directing people to social and economic assistance. Private home-owners offer places to stay for healthcare workers, and privately funded and managed resources are offered to those in need within the community. The allocation of material resources, expertise, and volunteers is powered by digital means to reach a wider constituency.

Exercise question:

Is this limited to specific regions or areas?

Is this limited to specific socioeconomic classes or other groups?

In what ways will this impact the way people plan their futures?

Trends to consider:

- State partnerships
- Vaccine review board
- DIY
- Barter economy
- Buy nothing movement
- Volunteer army
- Alternative currency
- Quaran-team
- Trust deficit
- PPE sharing by states

- Disinformation
- Post-establishment cultur
- Partisan politics
- Reparation
- Wealth redistribution
- Stigmatizing wealth
- Mayors' network
- Universal basic income
- Debt cancellation
- Farm in a box

YOUR GROCERY LIST IN 2030

What is on your grocery list in 2030?

Take a moment to review the foresight stories: **Grown to Order**, **Deglobalization**, **Kind Food** and **Resilient Coalitions**. Extending these ideas into the end of this decade, situate yourself in the future - 2030.

You're putting together a list of grocery items you need this week.
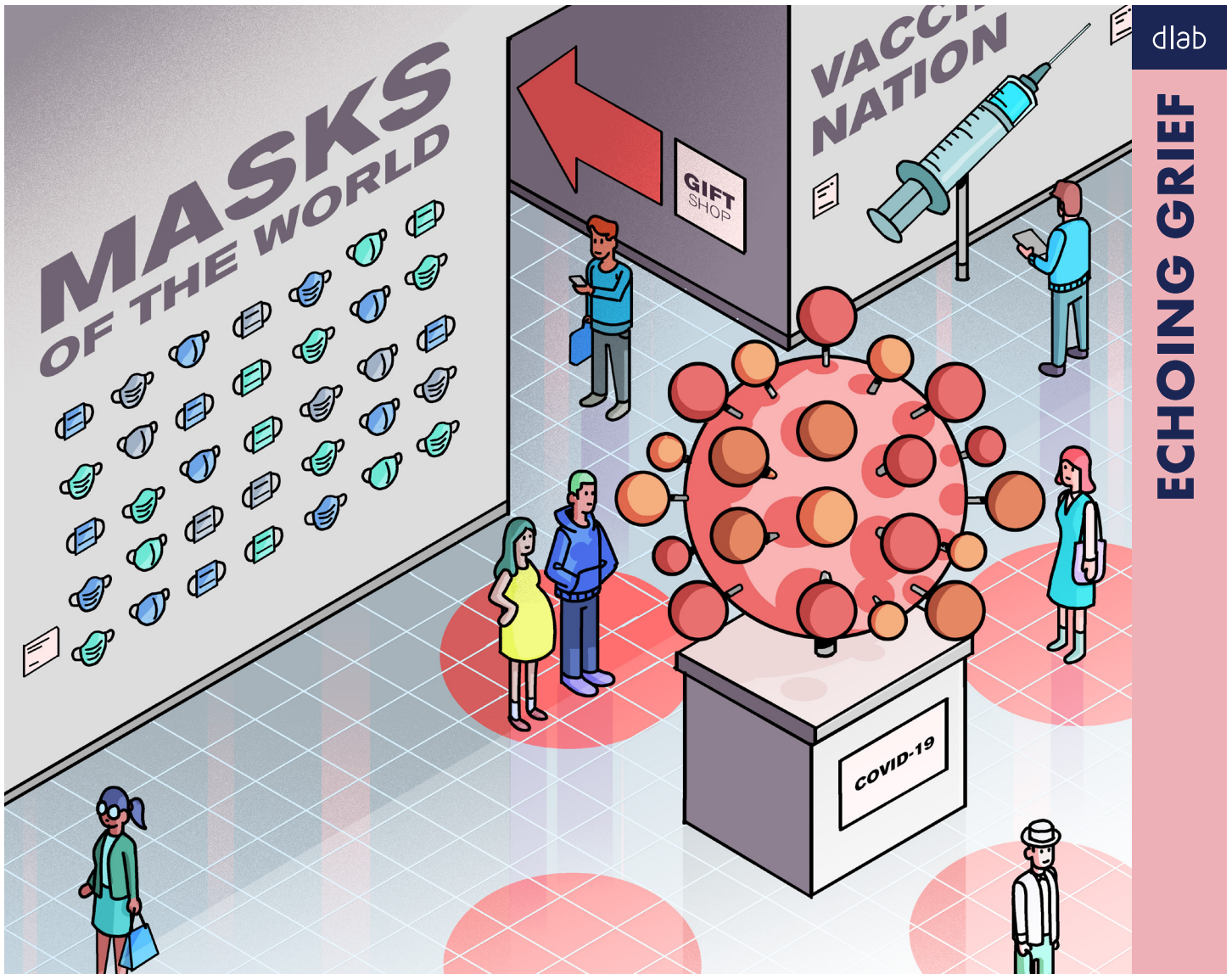
How and where do you shop for food?

_____

_____

_____

_____

_____

_____

_____

_____

What's on the shopping list that is inspired by these foresight stories?

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

☐ _____

The grief and loss from the pandemic continues to echo through the decade.

COVID-19 did not discriminate, but our social structure clearly did. Communities of color, low-income families, and those with pre-existing conditions were hit hardest by infection and fatalities. Countless people said their final goodbyes via phone, unable to physically be there for the final moment of their loved ones.

Death may be a definitive end for the person departing, but it's only the beginning of the grieving process for those left behind. The emotional, psychological, social, and financial tolls of losing someone to COVID continue to echo in our lives, affecting our priorities and decisions. We are collectively much more engaged with the fragility of our lives and the inevitability of our own mortality. As we mourn, we pledge to never take life for granted.

Exercise question:

How long might this be the case?

How might this trend evolve over time?

Trends to consider:

- Pandemic fatalities
- Economic cost of death
- Freezer morgues
- Mass grave
- Virtual goodbyes
- Zoom funerals
- Medical debt
- End of life planning
- Stigmatizing wealth

- Digital preservation
- Destigmatizing mental health
- Destigmatizing death
- COVID orphans
- Alternative burials
- Democratizing death
- Unmet death wishes
- Contentious election
- Poverty & hunger

STORIES FROM THE FUTURE

Will & Joe

January 2032. Seattle, Washington.

Busy, busy - that was the way Will liked it. If he was busy, he didn't have time to think. Thinking wasn't something he liked to do too much of, these days.

At 63 he was close to retirement age, but he didn't have to think about that, either. The way people worked was different now. Retirement - an antiquated concept in and of itself - was more or less gone. People took so many micro-gigs now, both for private companies and in the public sector. After the rapid migration and homelessness crises, major cities and counties across the nation began outsourcing vital services to ordinary citizens. The old infrastructure simply couldn't keep up. In exchange for subsidies, tax benefits, and other services, citizens like Will helped their cities maintain their basic social infrastructure.

In no time, his work began to fill up. His days were a blur.

SUNDAY

9:00 AM
Outsourced remote DMV work *(2 hours. Paid)*. Will had been wary of this job at first, as thoughts of the DMV conjured miserable people sullenly shuffling in bleak lines. He was, however, pleased to alleviate this misery by remotely capturing people's images with a facial recognition app, then delivering a digital driver's license to their cell phone within minutes.

11:30 AM
Water community garden *(Credit: harvest ripe fruit and veg)*. A hand-painted sign read "Our community garden is for everyone. Share gardening tips & meet new friends." Will appreciated the warmth, but tended to keep to himself. Friends meant questions, and questions mean having to talk about yourself.

12:30 PM
Drop extra fruit and veg to box by neighbour's front door *(Credit: Ride to airport when needed)*.

1:00 PM
Remote baggage scanning *(1 hour, paid)*. Airport baggage scanners were 99% accurate, but that 1% meant human eyes were still needed. Will would watch a live stream of the insides of people's bags, alerting the baggage A.I. if he saw anything suspicious. He had seen a cattle prod, a bowling pin, even a stowaway cat who had anxiously crawled into his human's bag.

2:30 PM
Check community task app. Assemble a bed *(Credit: backgammon lesson)*. Will was pre-approved to do carpentry tasks for the city;

he input his profile and the person in need of help, Jane Davis of 801 Bald Mountain Road, accepted. At her house, he built the bed in no time. As Will began to pack his things, Jane - a nervous looking woman near his age - said "I should be able to do this myself, but my husband would always"… and trailed off. Will sensed a sadness that he knew too well, and left as quickly as he could.

3:30 PM
After school child care *(Credit: Week of home cooked meals)*. Will set up a 6th grader, Suzie, with some snacks and her homework helper A.I. She'd been coming by after school for a few weeks now. When her mom picked her up, she was bearing a homemade cherry pie. "No, no," she insisted, "no credit necessary for this."

5:00 PM
Will drove an elderly neighbor to a pop-up Vax truck *(Credit: Health points)*. In the brief ride together, she had updated Will on all her family travels during the holidays. She kept waving goodbye with a big smile as he drove away.

5:40 PM
Will waited in line at the most popular restaurant in town - one that didn't take reservations. Before it opened at 6pm, a couple ran up, out of breath, and took his spot *(Credit: Year-end tax advice)*. They hurried into the restaurant and walked up to the host.

At 6pm Will had one more appointment. He took a seat on a park bench, pulled a wireless charger out of of his pocket and set it next to him. Using one of his accrued health points, he connected with a therapist; a female voice - human, not A.I. - came in loud and clear, issuing through a speaker built into the bench.

"Hello Will, it's good to see you." This is Sheila, his bench therapist. *Bench therapy* wasn't the official name for this health care initiative, but participants called it that. He had been doing it for a while now, so Sheila already had all his details, but if you were new to it, you could just take a seat and upload your medical profile and be matched with a therapist immediately.

This was the only place Will felt safe enough to speak of the things he didn't want to think of. Maybe it was because it wasn't face to face? Maybe it reminded him of something he'd read about once that had stayed with him: an old phone booth, at the bottom of a garden in Otsuchi Japan, post the devastating tsunami of 2011. It was put there by a grieving uncle who would "call" his lost cousin to let his words be "carried on the wind." Unfinished goodbyes. Sarah came to him vividly, sitting next

to him on a park bench, feeding the pigeons in Central Park. Of course, he smiled wanly: *that* was why he felt comfortable here.

Will wasn't just busy, he was running from grief, packing his days so he didn't have to think about Sarah. Sheila had been able to eke information out of Will over many months, but he was still holding back. She knew he had lost his wife to Covid in the first wave and that even though 12 years had passed, the grief was still palpable. Will wondered if he'd be in a better place if things had been more normal when she passed. He had watched her take her final breath over an iPad, her hand grasping a medical glove filled with warm water in an attempt to imitate human touch. He'd numbly organized a funeral over Zoom, read her favorite poem, and clicked "leave meeting." Everything was a reminder, even his friends - they were *Sarah's* friends. Sarah was the social organizer of dinners and parties and life. After a while, he was aware that he was supposed to move on, but he saw his grief was a reminder of something people collectively didn't want to remember anymore.

Life was back to "normal."

He had left New York for a fresh start. He chose Seattle as one time he and Sarah had taken a trip to Mt. Rainier and she, on passing through, had said, "this is the kind of place I could imagine us getting old together in." He wondered now if he'd cursed himself with this town and the house where he'd painstakingly created the art space Sarah had fantasized about. He thought it would give him comfort, but the nights were long and lonely, filled with time to think. What could he have done differently? How could this have happened? His mind was his undefeatable nemesis.

"How's the remodel coming along?" That had been Sheila's idea, to change Sarah's space into something else. He was "hobbling his path forward," she had said.

"It's done. It's now a fully functioning ADU." During the remodel, Will packed up some of Sarah's belongings, and the painful memory of sorting her things after her death had hit him. What to keep, what to give to charity? A year after her death, he had seen a homeless woman wearing one of Sarah's homemade knitted sweaters and it had brought him some comfort; he knew Sarah would have been glad. He realized what he should do with this new ADU: he would open it up as part of the city's homeless relocation program *(Credit: tax exemption/monthly stipend)*.

"Someone is moving in Monday," he says.

Sheila ended their session the way she often did: "Have you had any dreams since I saw you last?"

"The same one," Will replied. In his dream, he wakes, hearing Sarah's voice leaving a message on their old analog answering machine. He runs to the phone, he has to talk to her, but he's moving through clay.

Right as he gets to the phone she hangs up and he wakes up, for real, gasping for air like a fish on a rug.

MONDAY

Knock knock.

Will opened the door to Joe, a scrawny 22 year old. Many doors had opened for Joe before - and then quickly closed. He had been homeless for four years after aging out of the foster system he'd been in since he was five. In the past, he would smile and be a good boy, in case this time it was his forever home, but the cycle didn't end. It was always something - one foster family relocated, another decided they didn't want to foster after all. Once he ran away from a terrible home, which got him labelled as "troubled."

Slam.

These days, Joe was resigned to never getting too comfortable.

Will saw a wary young man who never stood a chance. Joe saw a wary old man who had probably been told: "You don't know what you're going to get - foster kids are broken."

Will left Joe in his new home where the ghost of Sarah no longer lived. He felt foolish for saying "unpack your things," as Joe didn't have *things* - just a few clothes in a plastic bag. Joe could read people well, and already sensed Will was kind. He allowed himself a smile on seeing a woodpecker outside the window, but quickly re-set his face to somber.

This won't last, he reminded himself.

That first night, Will cooked for Joe, and they awkwardly small-talked their way through dinner - neither able to share their truths, even as photos of Sarah watched them from the mantel. But as with the snow on the mountains outside, there would come a thaw.

Will was the first person to not see Joe as just a statistic. 75%: the percentage of unhoused youth previously in foster care. He did what Sarah would have done - helped by being there.

He included Joe in his daily work routine. They were both incredulous the morning they saw a chainsaw on the airport baggage scanner, and delighted when the kale started coming in at the community garden. Joe loved the garden, and Will said he had a "green thumb," which was the first time in Joe's life that an adult had suggested he had a skill.

He went with Will when Jane, the lady he'd built the bed for, needed help moving some furniture, even teased Will, saying it was obvious Jane *like*-liked Will, who brushed it off - she was just lonely, he insisted. In the evenings, Will taught Joe how to cook, and Joe listened as Will opened up and started sharing.

Early spring, the tulips that Joe had been watering every day finally broke through the earth and turned their faces towards the spring sun.

Will was ready to talk about Sarah.

"She was a carer at a nursing home in Brooklyn during the first wave." Will's voice cracked, and Joe put a hand on his shoulder. Later that night, at the bench, his emotions were raw and ready to come out. He screamed into the park: "Why didn't I stop her? Why didn't I say: 'it's too dangerous, you can't go to work?!'"

After a pause, Sheila's voice, always calm, crackled through the bench speakers. "And what would she have said if you *had* said 'don't go?'"

Through his sobs he finally managed a whispered response: "She would have said, I'm going Will, I have to."

Sheila let that sit. Silence. Just the night and his ebbing sobs.

That night, Will had a dream. In it he saw Sarah, beckoning to him from a field of yellow. As he reached out for her hand he heard her voice, crystal clear: "You can always visit me," she said.

He woke up smiling.

EPILOGUE

Will knew that Joe was a gifted listener with a great deal of empathy and compassion for people with difficult experiences. It was Will who encouraged *him* to consider becoming a bench therapist. Joe was delighted to hear that from Will. He offered a

deal: "I'm gonna look into therapist training, but you'll have to accept a backgammon lesson from Jane."

Will and Jane now met once every other week to play, but were thinking of making it a more regular thing. It's what Sarah would have wanted.

Joe became a bench therapist. He loved the work - helping the hundreds of people in need at any number of benches dotted through the city. He was saving his money now to go to culinary school too, thinking of becoming a chef. By the time Joe moved out of Will's place, he was a better cook than Will ever was. He was interested in cooking with pharmaceutical ingredients to help people with depression through food.

Will and Joe remain a close family.
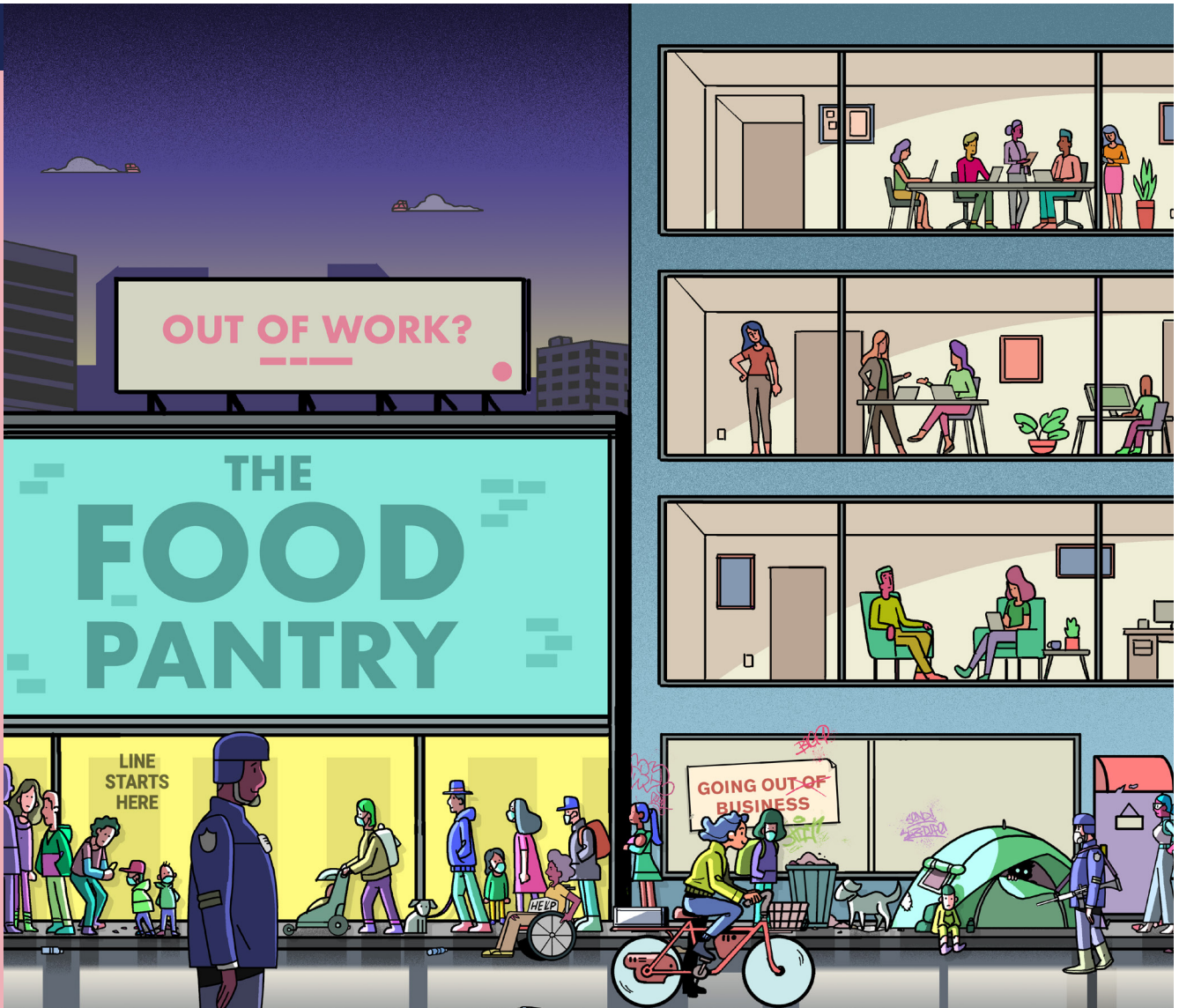
Poverty, hunger, and homelessness reach their peak in America.

The wealthiest Americans personally amassed billions of dollars during the pandemic, but millions of average people were pushed into poverty, food insecurity, and homelessness. Many applied for assistance to no avail.

The economic recession began as a sluggish recovery while vaccines were slowly distributed. Many families continued to struggle from financial hardship, medical problems, and most of all grief over loss: loss of jobs, loss of family members, and loss of pre-pandemic stability and security.

With so much inequity built into our social structure, policymaking is highly polarized. Divisive politics continue to shape the pace of public policy making. The burden of addressing the day-to-day needs of those living in poverty falls on local communities, forcing community leaders and ordinary residents to wear many hats to serve their people.

Exercise question:

If this were only limited to certain areas of life, what would it look like?

If this were expanded to all areas of life, what possibilities are there?

Trends to consider:

- Rural healthcare collapse
- Delayed disease detection
- Undertreatment
- Fear of exposure
- Distrust of medical institutions
- Work visa halt
- Immigration policy
- Syndemics
- Child abuse
- Uninsured population

- Mass eviction
- Food insecurity
- Unemployment
- High mortality among ommunities of color
- Insufficient stimulus
- Rise in suicide and homicide
- Increasing homelessness
- Domestic violence

Businesses make the apocalypse as comfortable as possible.

Consumer tech companies don't seek to resolve any crises, much less social problems. Instead, they focus on meeting consumer needs for being connected and entertained during climate collapse, social injustice, and economic hardship.

From air purifying masks to bullet proof, fire-resistant automobiles, consumers have choices in coping with the apocalypse in style. With the latest technologies and modern design, businesses seek to make looming disasters more survivable and more comfortable than ever before.

Thanks to those innovations, our lives continue relatively uninterrupted by severe air pollution, flooding, or even armed unrest in the city center.

Exercise question:

How do you feel about this story?

How do you think others would react to this emotionally, and why?

What do you wish would happen in the next decade?

Trends to consider:

- Safety pods
- Quaranteaming
- Luxury bunkers
- Bullet-proof cars
- Rise in gun ownership
- Air-purifying masks
- Everyday hazmat wear
- Anti-viral clothing
- 3D printed guns
- Anti-rape underwear
- Consensual condoms
- Flame resistant housing
- Desalination devices
- Empowerment gadgets
- Popularity of mysticism
- Domestic terrorism
- Alt-right organizations
- Police brutality
- Racially motivated violenc
- Anti-immigrant sentiment

The ethics of tech are monitored and regulated as a public safety concern.

AI ethics principles and ethical innovation practices are a core part of both technology business operations and regulatory commitments. Organizations go from managing reputational risks for ethics to promoting excellence in ethics as a competitive advantage.

Federal and international regulations require data-based technologies to be both safe and ethical, and ill-acting products are recalled to protect users' privacy and rights. Companies deemed to be non-compliant in ethical design practices pay a massive penalty, and are required to repair the damage incurred.

Much like business conduct and accounting records, ethics audits necessitate a dedicated effort to maintain and submit documentation on ethical innovation practices and proper testing protocols.

Exercise question:

If this were only limited to certain areas of life, what would it look like?

If this were expanded to all areas of life, what possibilities are there?

Trends to consider:

- Ethics regulation
- Bias automation
- Automation of inequity
- Data privacy
- Disinformation
- Social media disinhibitio
- Contested election
- Deep fake content

- Algorithmic biases
- Ethics economy
- AI ethics principles
- 4th industrial Revolution
- Criminal justice reform
- Defund police movement
- Anti-trust lawsuits
- Ethical innovation tools

BREAKING NEWS IN 2030

What's on the news?

Take a moment to review the foresight stories: **Echoing Grief**, **Catastrophic Poverty**, **Apocalypse Economy** and **Ethics Audit**. Extending these ideas into the end of this decade, situate yourself in the future - 2030.

You're reading the biggest news story of the year. What does it look like?

What is the headline?

The Observer
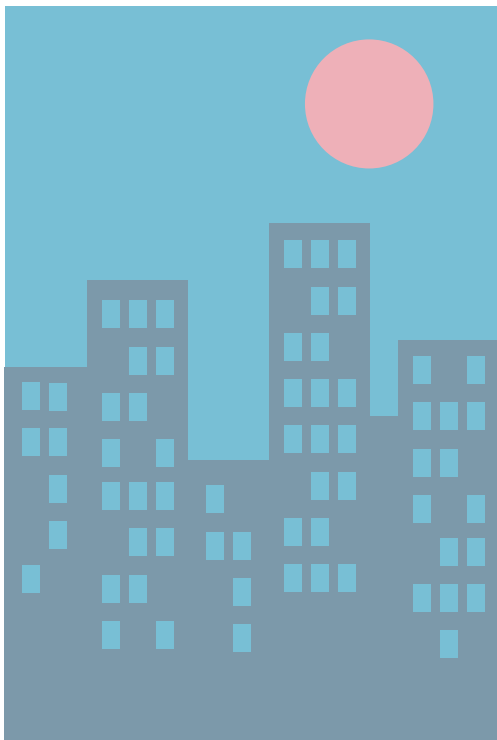
What's the news story about?

STORIES FROM THE FUTURE

The Healdsburg Tribune - Obituary

June 18, 2032. Bodega Bay, California.

Virginia May Walker of Bodega Bay, Sonoma County, died on June 16, 2032, at the home she had lived in for nearly 60 years. She was 98 at the time of her passing. Her beloved husband Benjamin, "Ben," Walker had recently returned home after a stay at a safe zone. He was with her when she passed quietly in her sleep.

Virginia was born during The Great Depression on Dec 6, 1934. Her family lived in Salinas, Monterey County. She learned empathy from a very young age from her father John, a doctor, who left his comfortable private practice to help migrant workers displaced by the Dust Bowl. She learned strength from her mother Clara, who, in full support of her husband's now much less profitable business, took a job to help raise their family of five. Clara was a telephone operator for the Bell Telephone Company, where she would wear roller skates to navigate the busy board. With this strong role model and Rosie The Riveter telling her she could "do it!" during World War II, Virginia became the first female in her family to go to college, attending San Jose State University, where she was just one of two females there studying biology.

This was a time when there was a belief that women attended college in order to *find a husband*, which made Virginia bristle. This was possibly why she turned down her future husband Ben's offer of dinner and a movie three times before taking him up on it.

Their first date was in 1954: "Casablanca" at The Castro. From then on, they were a team, bonded over their mutual love of animals. Over the course of their 74 year marriage, they rescued 17 dogs from local shelters and fed countless feral cats (her party trick, at 98, was that she could still name them all in the correct order of knowing them - *Charlie, Banjo, Teddy, Ruby, Maggie, Buster, Lola* - on and on). Jane Goodall, also born in 1934, was Virginia's hero. She had watched her journey of love and kindness with admiration and always said "because of Jane Goodall" when tourists would ask why she had become a park ranger. Her biology degree lead her to this job, although she always said that "job sounds too dull for this line of work; it's joy, not job!" For 15 years she *joyfully* gave tours and answered questions, surrounded by the beauty of Yosemite National Park.

It was there too, at 24, that Ben proposed. They were wed at a small ceremony at The Yosemite Valley Chapel with squirrels as their witnesses. Their beloved daughter Esme was born three years later. Virginia was proud that she instilled her love of animals in Esme, who as an adult was responsible for the popular "Must Love Dogs" apartment code planning bill that passed in 2030.

Over the years, Virgina saw the Berlin wall built and fall, wept upon hearing of JFK's assassination and then, a few years later, Martin Luther King's. She, along with the rest of America, held her breath

watching Neil Armstrong land on the moon, the tiny TV frizzing in and out as Ben tinkered with its rabbit-ear antennas. She rejoiced at the ruling of Roe v. Wade and worried at its overturning. A tireless advocate for the environment since the 1970s, she was still marching, albeit with a cane, well into her 90's.

At 40, Virginia left her joy at Yosemite National Park to find it in another arena as a teacher (her work with the Junior Ranger program had always been her favorite). They purchased a house in Bodega Bay, and became a kindergarten teacher for the next 20 years, where she was afforded the distinct pleasure of children seeing her outside of school doing mundane things like shopping and their amazement that "Miss Walker," their teacher, would *do* such things. For many years more, she was afforded the pleasure of these same children, now grown, recognizing "Miss Walker" and reminding her of macaroni necklaces, fingerprint trees, the reading circle rug, and all the wonderful days they had spent together.

At Virgina's behest a living funeral was held in her honour on June 2nd. Organized by her daughter, it took place at the fence line of Virginia and Ben's house and their neighbor Rose's house. This spot had become significant for them all in 2020. This was a positive of the pandemic: neighbors who were once just fleeting "hello" neighbors, that you occasionally saw when getting the mail, became "tell everything to" friends. They would meet at 4pm every day for downloading, tears, and to say out loud what they were grateful for - important to remember in those trying days. They would drink wine or in Virginia's case, a small sherry (this and apple cider vinegar were what she considered the secret to her long life), along with love and an animal to pet in arm's reach.

As the pandemic days dragged on, this became known as Fence Time. In that sacred space, under her favorite coastal live oak tree, they became closer than ever before at a distance of six feet. There "What day is it?" didn't matter anymore. Friday was Monday was Tuesday was Sunday. Their lives unfolded in the yard. Haircuts, family visits, friend visits; they would bring their best howls for the nighttime ritual in honour of first responders.

Virginia's funeral was full of the sound of laughter. She was delighted by the endless parade of students she had taught that showed up, thrilled by all the sweet treats she wasn't supposed to eat but was going to anyway, today. "You only die once," she was heard saying. The only time a tear was shed was when Ben recounted their beautiful life for everyone, finishing up with his best Humphrey Bogart impression: "Here's looking at you, kid."

Per the "natural organic reduction" bill that passed in California in 2027, Virginia has gifted her body to nature. She will become soil that will regenerate the earth that she loved so dearly.

All donations in her name should be made to the Jane Goodall Institute.

One Month Later

Ben received the soil that was Virginia and scattered it around her coastal live oak tree at the fence line. Over the next few months, he sat with her often, recounting his days and asking her advice. It was comforting to be able to come to this tree and know his wife was there. This tree, protected by California law, meant she too was protected. She grew into native wild flowers that the animals - particularly raccoons - loved.

Two months later, Ben passed and he joined her in the soil. Their roots are forever interconnected once again.

WHAT NOW?

This workbook section is for those who work with customers in this unpredictable environment. Here, you will find exercises designed to help you think more flexibly about the future and guide you through the process of planning a foresight discussion with your customer.

If you're working with a customer in a manufacturing industry, the exercises will tap you directly into relevant questions. We had you in our minds as the audience for this section.

If you're associated with a different industry, different responsibilities, or have different reasons altogether for reviewing this material, welcome! Feel free to modify or rephrase the exercises as you see fit. The exercises should still be thought-provoking.

BUILDING DIALOGUE

In a solution economy, you need to cultivate trust.

The use of strategic foresight has been increasingly popular in business for the last couple of decades. 2020 certainly accelerated that trend, as many organizations reimagine the post-pandemic future. If you're working with a customer who is eager to begin that reimagination, this next section can help craft a meaningful dialogue.

An effective dialogue is central to building trust, and trust is the cornerstone of the solution economy. Now more than ever, businesses are gravitating toward opportunities to rebuild, redesign, and reassess their priorities and goals – and looking for reliable and creative partners to do that with. To leverage futures thinking with them, a little planning can go a long way.

RELATIONSHIP WITH CUSTOMERS IN

Product Business
- Transactional
- Project-based
- Short term
- Technology-driven

Solution Business
- Collaborative
- Partnership-based
- Long term
- Trust-driven

THE ART OF LISTENING

Dialogue requires attentive, analytical, and thoughtful listening.

Traditionally, sales conversations may have been technology or product-focused. The specs and numbers "spoke for themselves," some would say, and all the information customers wanted to know was etched neatly on presentation slides.

But futures thinking is open, exploratory, and sometimes messy. The value is in creatively engaging with possibilities, not in the outcome alone. You need to plan proactively and thoughtfully to design that conversation.

First and foremost, you will be listening – a lot. You may be very familiar with all of your customer's concerns by now. But no one will refuse a chance to be listened to with care. And no matter how well you know them, there is always much to discover. We are here to help you become a fantastic listener.

SO LET'S PLAN FOR THAT DIALOGUE

Many businesses are thinking about how they'd continue to thrive during and after the global pandemic. Their plans are being reassessed and revised. They are looking to their trusted partners for council, support, and guidance. Our goal is to guide you to a well-rounded set of discussion points and questions for that meeting. Even if you're a total foresight novice, no worries.

ORIENTING TOWARD THE FUTURE

What is your customer's relationship with the future?

Select a customer you're currently working with for this exercise and the activities that follow. We suggest you go through the entire exercise all the way through for each customer.

How would you locate your customer on this map? Is your customer feeling hopeful or worried about the future? Empowered to shape the future, or not as much?

There's absolutely no right or wrong answer here. It simply describes their general sentiment about the future, and how you may want to support the customer in the future.

The reasons behind those sentiments can serve as insightful topics of conversation too. Why are they worried? What empowers them? How else can you assist?

Empowered to
shape the future

Worried about
the future

Hopeful about
the future

Helpless to shape
the future
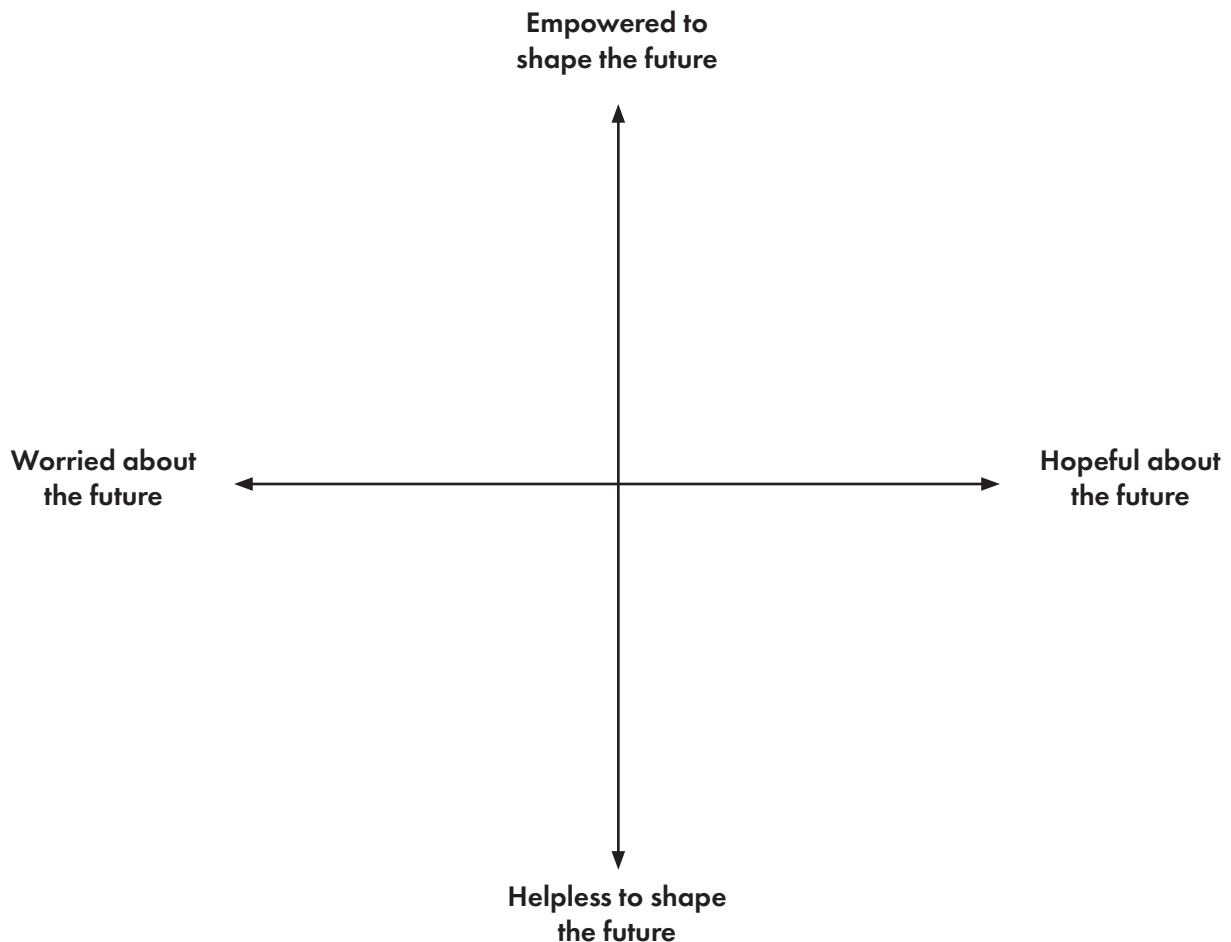
R-C-R ASSESSMENT

Let's assess your customer's situation with a quick exercise.

This exercise is called R-C-R, which stands for **Revelation**, **Confrontation**, and **Resilience**.

When something big happens, it often magnifies known challenges and uncovers latent ones. Businesses will have to cope with both, having to confront the most urgent problems first, then building a long term plan for managing them in the future. Based on what you currently know, how would you describe your customer's R-C-R? If you don't know much, it's perfectly fine to jot down what you can.

Revelation

What's been revealed about your customer's business and its vulnerabilities this year?

Confrontation

How is this customer coping with these things? How are they confronting them in small and big ways?
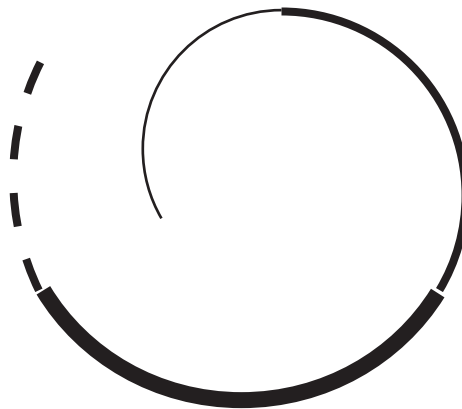
Resilience

How is this customer building long-term resilience on these challenges? What were they already resilient on?

Revelation

_____
_____
_____
_____

Confrontation

_____
_____
_____
_____
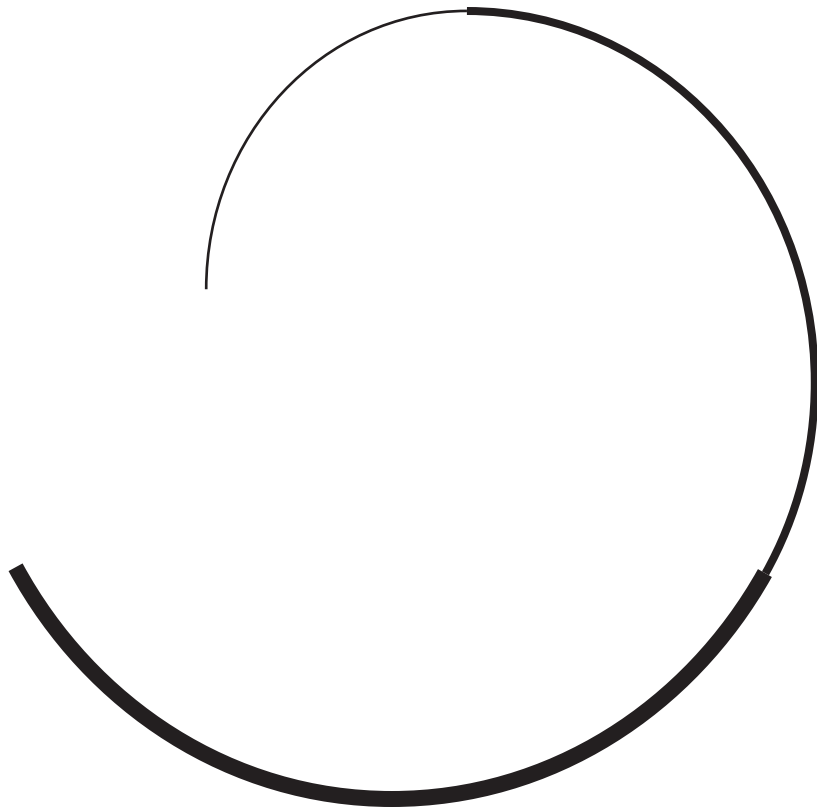
Resilience

_____
_____
_____
_____

Tip: Revelation, confrontation and resilience building for different issues can happen concurrently. There is no end to this cycle as change is constant. To make it easier focus on the most recent/urgent revelations.
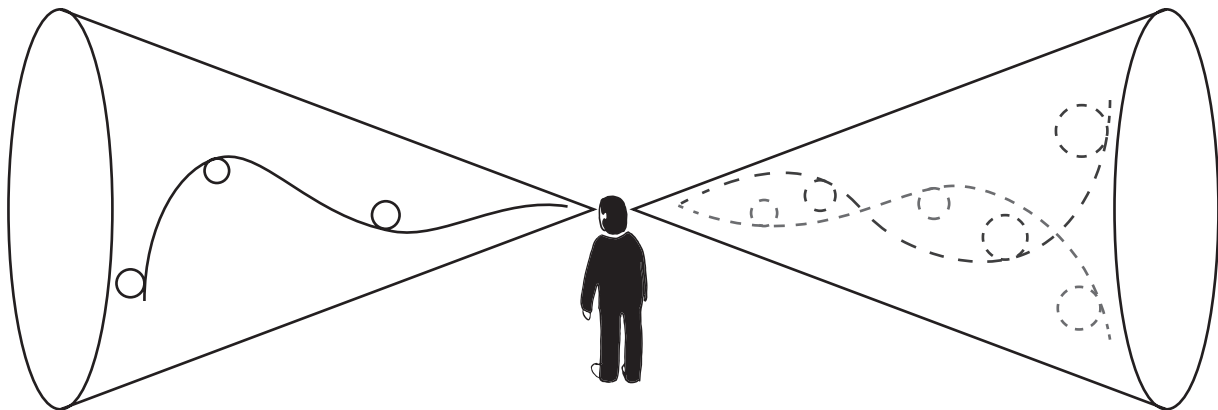
HINDSIGHT X ANTICIPATION

Anticipate the future as you reflect on the past

The future doesn't begin at the stroke of midnight. There are always traces of future in the present, quietly waiting to burst into their full potential if given a chance. Futures thinking is a perspective-taking process; you bring the present to the future, and the future to the present. Continuity must be thoughtfully enacted every step of the way. Present and future exist on a continuum.

You have the gift of hindsight when you're thinking about the past. Past complexities give way to a more coherent narrative of what happened.

You have the gift of agency when thinking about the future. It hasn't happened yet, and you hold the power to influence the outcome. There are many possibilities.

Coherent story based on
what happened

Speculative story about
what might happen

HINDSIGHT X ANTICIPATION
Continued

Practice perspective taking by answering the following questions:

Future as present
What is the most futuristic object in your surroundings?
What does that say about your notion of "the future"?

_____
_____
_____
_____

Future as past
What past mistakes are you likely to repeat in the future?
What does that say about things that stay the same?

_____
_____
_____
_____

Present as past
What changes today will you be happy you made in the future?
What is keeping you from securing these changes?

_____
_____
_____
_____

This is a great exercise to do with your customer to gain insight into the ways in which they think about the future.

GET TO KNOW FORESIGHT

Dropping foresight in manufacturing context

Say your customer is a manager at a mid-sized auto parts manufacturing plant. Even prior to COVID-19, s/he was concerned with several challenges to your operation – on-time production, delivery delay, workflow management, misalignment with distributor, and employee morale. Then 2020 happened.

There are some tangible behavioral shifts s/he needs to accommodate – social distancing, masking, testing, isolating, etc. But the foresight here encourages you and the customer to go deeper and broader: what are the larger shifts in his/her values and vision? What are some of the big paradigm shifts s/he is facing? Let's take a foresight and enact how to apply foresight story to their context.

Here is one example of foresight:
Trust Deficit. Take a moment to read it through.

In what way does trust play a role in the customer's operation?
_____
_____

What are good examples of "trust" in the customer's factory?
_____
_____

In what ways would lack of trust affect his/her operation?
_____
_____

Has the meaning of trust changed recently? How?
_____
_____

GET TO KNOW FORESIGHT

Dropping foresight in manufacturing context

Repeat the same exercise with two (or three or four) other foresight stories. You can choose them based on a few criteria. For example:

- Which ones resonate with you the most when thinking about the manufacturing industry?

- Which ones stand out to you as crucial for this particular customer?

- Which ones do you disagree with, and want to explore why?

- Which ones seem so far-fetched with respect to manufacturing that you want to challenge yourself to draw connections?

Or if you're feeling lucky, go ahead and do a shuffle – draw one at random.

Foresight Story #1: _____

Take a moment to read it through. What about your customer's operation comes to mind?

_____
_____
_____

What are good examples of _____ in the customer's factory?

_____
_____
_____

What are examples of _____ playing out in the wrong way at this factory?

_____
_____
_____

GET TO KNOW FORESIGHT

Dropping foresight in manufacturing context

Repeat the same exercise with two (or three or four) other foresight stories. You can choose them based on a few criteria. For example:

- Which ones resonate with you the most when thinking about the manufacturing industry?

- Which ones stand out to you as crucial for this particular customer?

- Which ones do you disagree with, and want to explore why?

- Which ones seem so far-fetched with respect to manufacturing that you want to challenge yourself to draw connections?

Or if you're feeling lucky, go ahead and do a shuffle – draw one at random.

Foresight Story #2: _____

Take a moment to read it through. What about your customer's operation comes to mind?

_____
_____
_____

What are good examples of   _____   in the customer's factory?

_____
_____
_____

What are examples of   _____   playing out in the wrong way at this factory?

_____
_____
_____

GET TO KNOW FORESIGHT

Dropping foresight in manufacturing context

Repeat the same exercise with two (or three or four) other foresight stories. You can choose them based on a few criteria. For example:

- Which ones resonate with you the most when thinking about the manufacturing industry?

- Which ones stand out to you as crucial for this particular customer?

- Which ones do you disagree with, and want to explore why?

- Which ones seem so far-fetched with respect to manufacturing that you want to challenge yourself to draw connections?

Or if you're feeling lucky, go ahead and do a shuffle – draw one at random.

Foresight Story #3: _____

Take a moment to read it through. What about your customer's operation comes to mind?
_____
_____
_____

What are good examples of _____ in the customer's factory?
_____
_____
_____

What are examples of _____ playing out in the wrong way at this factory?
_____
_____
_____

IMAGINING MULTIPLE FUTURES

Imagining multiple possible futures in diverse conditions
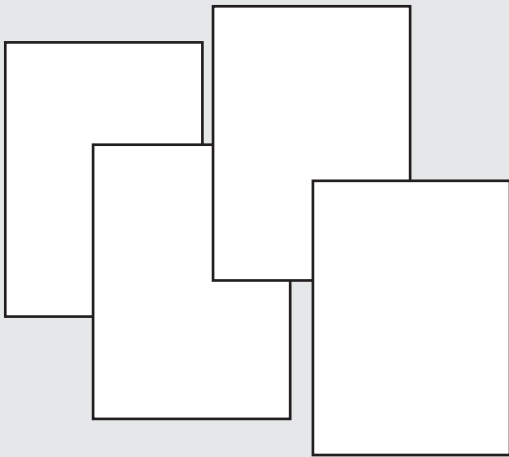
The past, present and future are inexplicably connected. Much the same way your present was shaped by your past, you have an opportunity to shape the future.

An important stance in futures thinking is embracing the plurality of future possibilities. Future is not fixed; there are many possibilities and many ways to orient yourself toward preferred futures. The goal here is not an accurate prediction, but strategic exploration for being prepared.

Firmly keeping in mind foresight stories you've reviewed, explore a range of possible future scenarios. We have three types of scenarios to consider: expansive, marginal, and transformative. Try to think of as many answers as possible to each prompt.

INSTRUCTIONS

1. Print the foresight stories you picked.

These stories are part of a bigger world. What does it look like?
_____
_____
_____
_____

Which aspects of these stories might have the biggest impact on manufacturing?
_____
_____
_____
_____

How might the manufacturing ecosystem be affected?
_____
_____
_____
_____

2. Let's drop your customer in this future ecosystem.

Expansive
Imagine everything does unexpectedly well for manufacturing in the next decade. What would your customer's operation look like? Describe and/or sketch your ideas.

Marginal
Imagine things are slower and more challenging than your customer wants. What would your customer's operation look like? Describe and/or sketch your ideas

Transformative
Imagine there is a game changing shift in the customer's business ecosystem, forcing him/her to pivot entirely. What would your customer's operation look like? Describe and/or sketch your ideas.

This is a good place to check in.

If you're doing these exercises hypothetically without the customer's input, try to guess at their possible answers to these questions. If you're discussing this with your customers directly, keep the following questions in mind as the discussion goes on.

These check-in prompts are for you – these are to be answered by you from your own perspective. These questions encourage you to analyze the customer's situation more deeply and help you show up as a fully engaged listener in the dialogue.

CHECK IN

Take a moment to think through on your own.

What are some of the customer's assumptions that may be incorrect or counterproductive?

_____

_____

_____

What partners and vendors are the customer most dependent on? Are those relationships well managed?

_____

_____

_____

Use three adjectives to describe the customer's relationship to technology.

_____

_____

_____

Based on your answers, what resource or help can you imagine the customer needs?

_____

_____

_____

CLAIMING PREFERRED FUTURES

Building consensus and committing to preferred futures

There is nothing more frustrating than planning for the future when you fundamentally disagree on what it is. The challenge of futures thinking in an organization often has less to do with the techniques of foresight and more to do with this lack of consensus.

Exploring possible futures can be a productive and engaging way to make explicit what's often left unsaid in an organization. What are our preferred futures? How are we really doing, and what do we do to nudge things in the preferred direction?

This is not limited to stakeholders within an organization. A shared understanding of the preferred futures is critical for building trust in customer engagement and innovation projects.
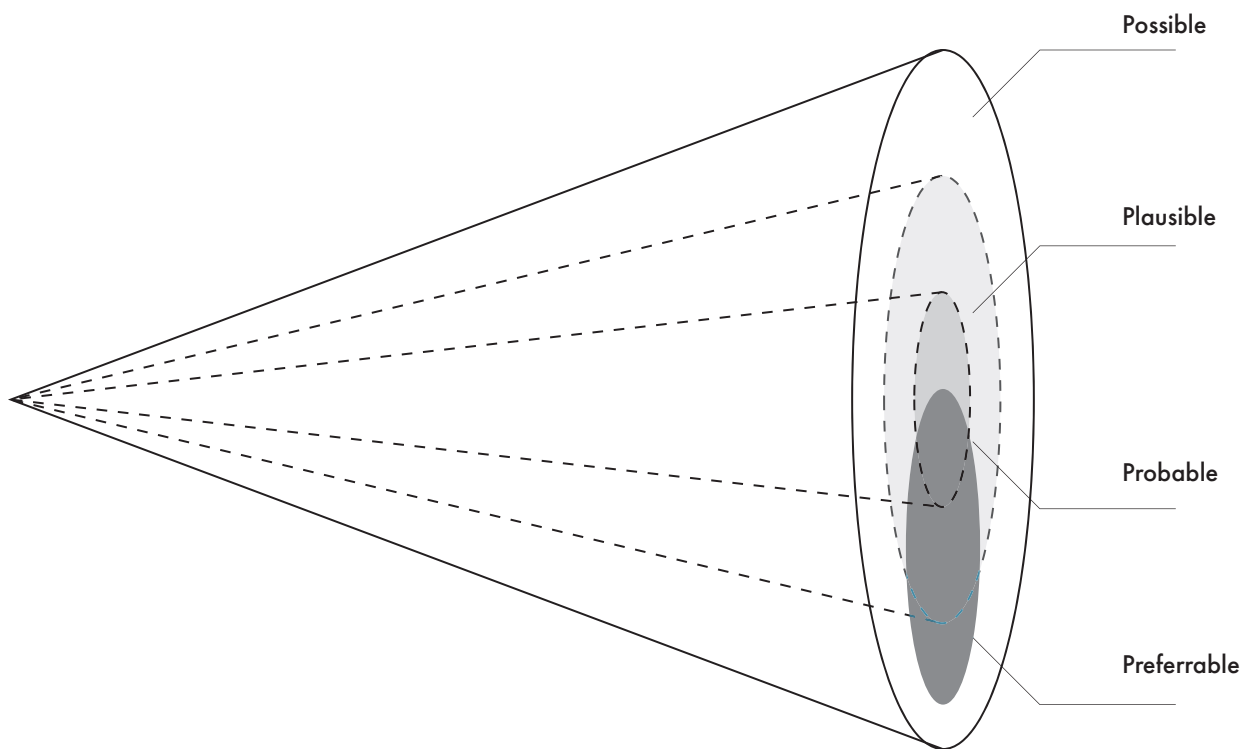
Futures cone. Adapted from Voros, Joseph. "A generic foresight process framework." foresight (2003).

Possible

Plausible

Probable

Preferrable

Given the wide range of possibilities discussed thus far, the customer's preferred futures include the following. Describe and/or sketch these futures.

_____
_____
_____
_____
_____
_____

STAKEHOLDER MAPPING (TODAY)

How would the relationships to key partners shift?

Most businesses exist in a vast ecosystem - comprised of partners, vendors, suppliers, customers, competitors, and many other stakeholders with their own goals and challenges.

Your customer is likely enjoying some good partnerships with some while constantly working to improve others. Acknowledge the present state of those relationships, then extrapolate them for a preferred future.

Who are the customer's key partners today?

_____
_____
_____

What new opportunities and limitations exist in those relationships?

_____
_____
_____

Use next page to draw the relationships between your customer and key partners.

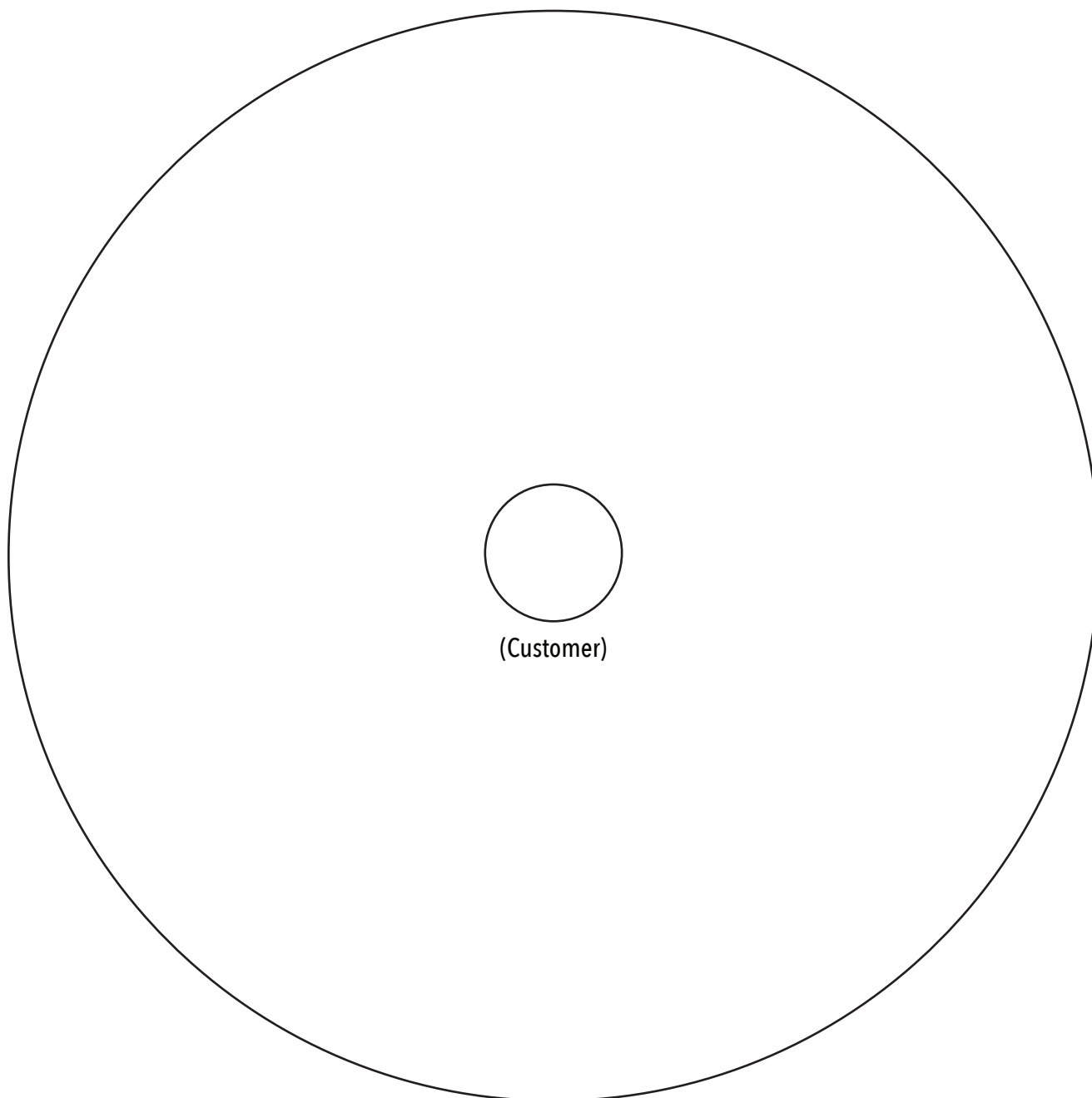**Draw circles to show the stakeholders from the previous step.**
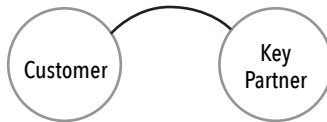
Connect stakeholders with lines to show relationships.

collaboration
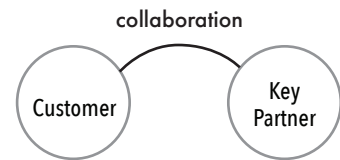
Write down what their relationship looks like

Stakeholder Map (Today)

(Customer)

70

STAKEHOLDER MAPPING (FUTURE)

How would the relationships to key partners shift?

1. Who are the customer's key partners in this future? What happens to current key partners? Who may be phased out or added to the mix?

_____
_____
_____

2. In this preferred future, what new opportunities and limitations exist in those relationships?

_____
_____
_____

3. What can you do with your partners to steer the future in the preferred direction?
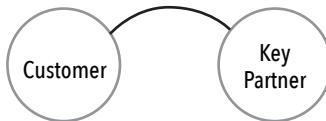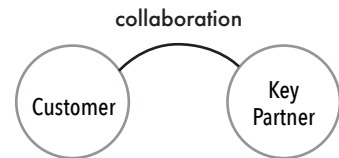
_____
_____
_____

Use next page to draw the relationships between your customer and future key partners.

Draw circles to show the stakeholders from the previous step.

Connect stakeholders with lines to show relationships.

collaboration

Write down what their relationship might look like in the preferred future.

Stakeholder Map (Future)

(Customer)

Compare this stakeholder map with the map from the previous step. What are the differences?

PROBLEM STATEMENTS

What are the anticipated challenges in the future?

Some of your customer's preferred futures may be realistic. Some, you may be thinking, are quite ambitious, if not improbable. Most likely you have both, and everything else in between.

Given the preferred futures of your customers, what are some of the anticipated challenges?

When thinking through those anticipated problems, it's important that you delineate the difference between cause and effect. For example, given that production has been perpetually behind, you might say "delivery delay will continue to happen." It sounds like a simple enough problem, but this is not exactly a problem. You're stating a *symptom* of the problem.

Instead, you'd want to try to get as close as possible to the source of the problem. Try to break those big ones down. You might say, "mismanaged machine downtime will continue to cause delivery delay" or "workers who are not sufficiently trained on the scheduling software will continue to struggle in bringing orders up-to-date." Now you've gone deeper to identify the true (at least possible) source of the issue.

This is a challenging but extremely crucial step. Clearly articulating problems allows stakeholders to disagree, negotiate, and ultimately build shared understanding on them. Otherwise, multiple stakeholders may have different perspectives into the production, and never having a chance to work them out.

It also allows you to be solidly on the same page as your customer.

PROBLEM STATEMENTS

Continued

Now let's work on those anticipated problems. Remember to be as specific as possible. Some of those problems may be extrapolated from issues today, or they may be entirely new challenges resulting from new trends or changes.

Example: "In the future, the production output will be limited by suppliers' capacity because they are already struggling to meet demands."

In the future, _____

will be a problem because _____

_____

_____

_____

_____

_____

_____

PROBLEM STATEMENTS

Continued

As an optional step, you may sort these statements to assess *priority* and *actionability*. For example, which ones are more urgent than others? Which ones does the customer have more control over?

Other criteria include cost, time, impact, resources, etc. Here is an example matrix with Control + Urgency. The items in high urgency and high control are a priority.

You can draw a similar matrix with whichever combination seems appropriate, and place problem statement post-its in their respective positions.

Urgent

Less control ← → More control

Non-urgent
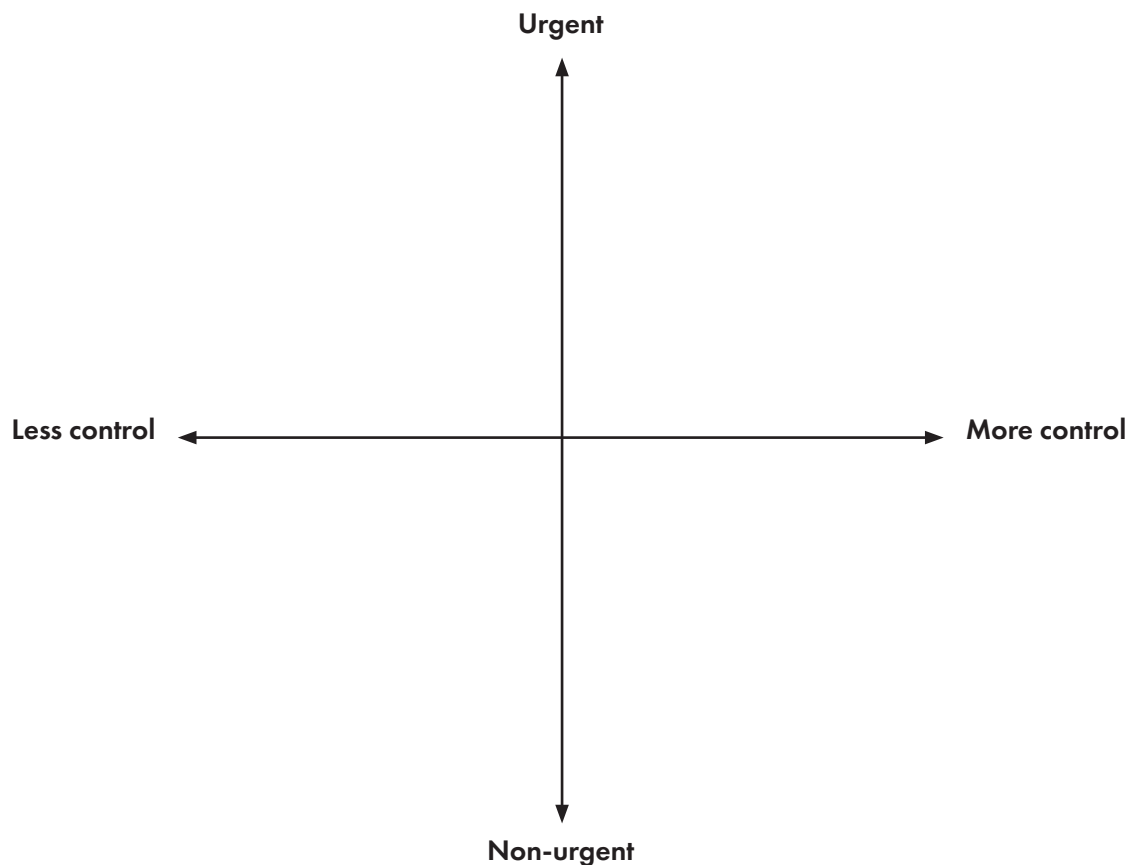
REFLECTION

What did these exercises reveal about your role with the customer?

At the beginning of the workbook section, you did a quick R-C-R exercise. Off the top of your head, you answered questions about your customer's situation and his/her plans.

Now you have a much more thoughtful perspective. You've gone through exercises designed to guide you through futures thinking. You've explored questions from your customer's perspective as well as your own.
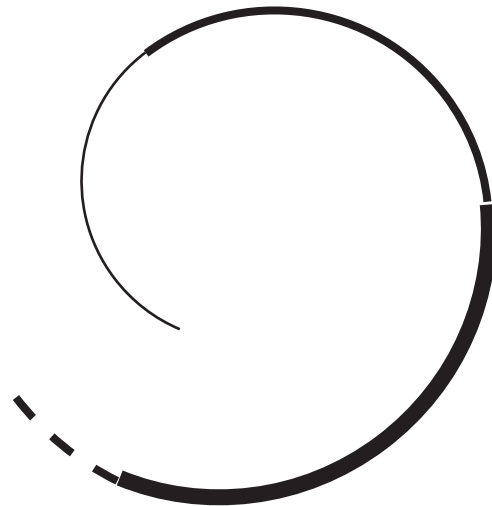
Let's revisit the R-C-R again but with a slightly different twist. What did these exercises further reveal about your customer and his/her challenges?

Revelation

What's been revealed about your customer's vulnerabilities and challenges through these exercises?

Confrontation

In what way is the customer coping or not coping with these challenges?

Resilience

How can you offer value in your role to this customer in the long term? What additional expertise or allies should you access within your organization?

CLOSING

**Thank you for thinking
through futures with Dlab.**

The idea to create a foresight workbook was
originally inspired by feedback we received from
our foresight audience. We hope that this booklet
offers you means to engage in futures thinking on
your own or in company with others.

If you have any questions or feedback, we are
always delighted to hear from you. Please reach
out to us at dlab@hal.hitachi.com.