

# STORIES FROM PLANET **B**

\* Presented by:  
MAVERICK\* RESEARCH

Gartner®

Gartner Maverick\* Research Presents:

# Stories From Planet B

*A Science Fiction Anthology*  
*November 2021*

Gartner Maverick\* research delivers breakthrough, disruptive and sometimes contradictory ideas that challenge conventional thinking. Formed in our research incubator, it is designed to explore alternative opportunities and risks that could influence your strategy.

This Maverick\* explores the future by using science fiction storytelling. As executive leaders imagine the future, they must use storytelling as a way to overcome conventional wisdom and to prepare their organizations for the unknown.

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“We will not establish self-sustaining colonies in space for at least 100 years, so we have to be very careful in the meantime.”

– *Professor Stephen Hawking*

**Have you ever wished you could start over** from a blank slate? As the urgency of issues like food insecurity, income inequality, biodiversity and sustainability threaten the status quo, it’s tempting to envision a plan B, or an alternate scenario, where these challenges don’t exist.

We’ve done just that, and asked Gartner analysts and the Gartner creative team to imagine the year 2120 and beyond. In this scenario, we failed to save Earth from the aforementioned threats, and we are colonizing Planet B.

“Stories From Planet B” is our latest Maverick\* research anthology. It includes 23 stories that wrestle with the question, “What happens if Earth is uninhabitable and humans need to go to a Planet B?”

Each story includes a Maverick\* idea that highlights its value to the executive leaders of today. Our goal is to encourage you to think in new ways, using these stories to explore alternate scenarios within your own business.

Let us know what you think by sending an email to [maverickresearchprogram@gartner.com](mailto:maverickresearchprogram@gartner.com).

Enjoy these stories from Planet B!

The Gartner Maverick\* Leadership Team

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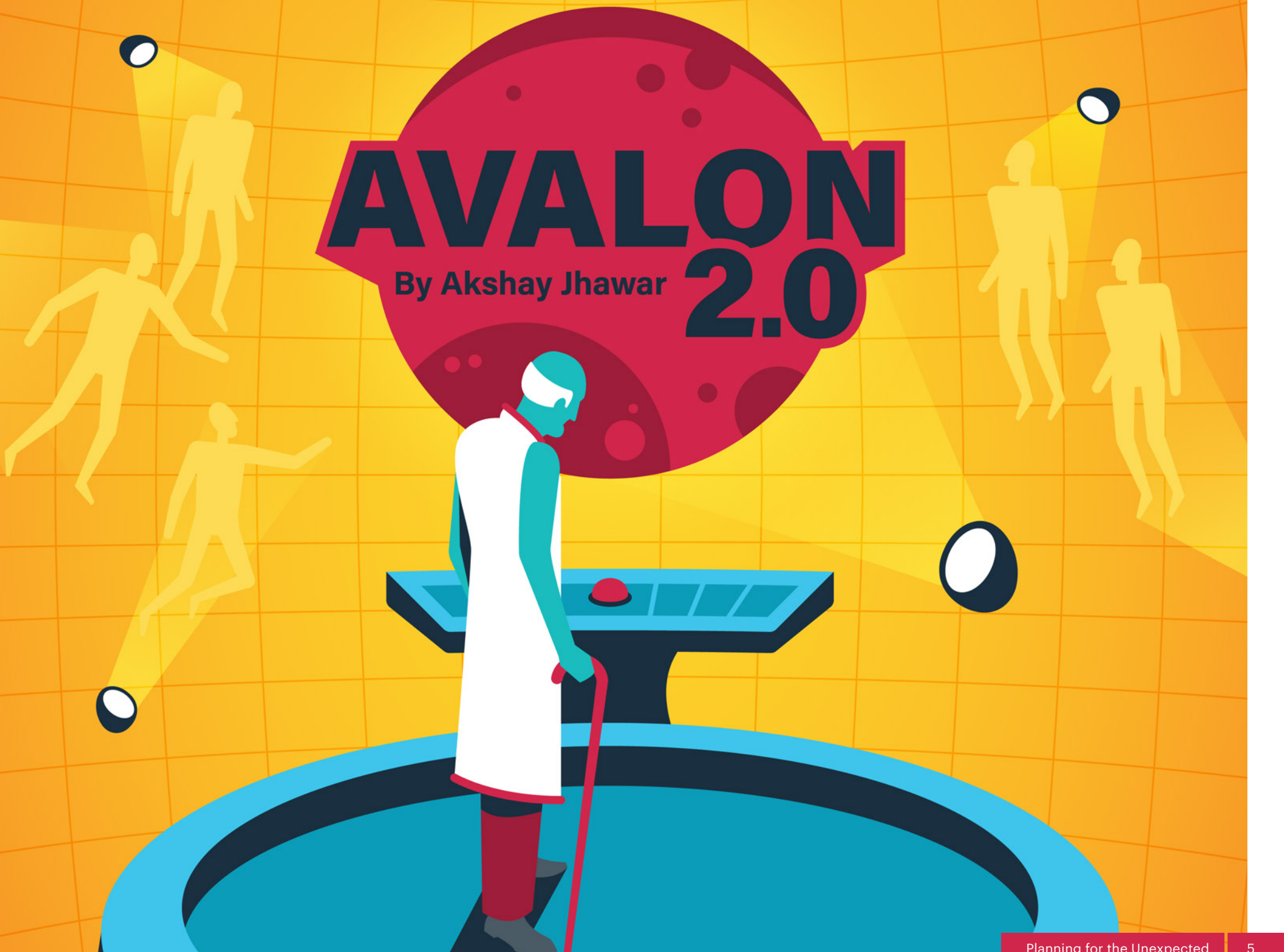
*Dan Berman*

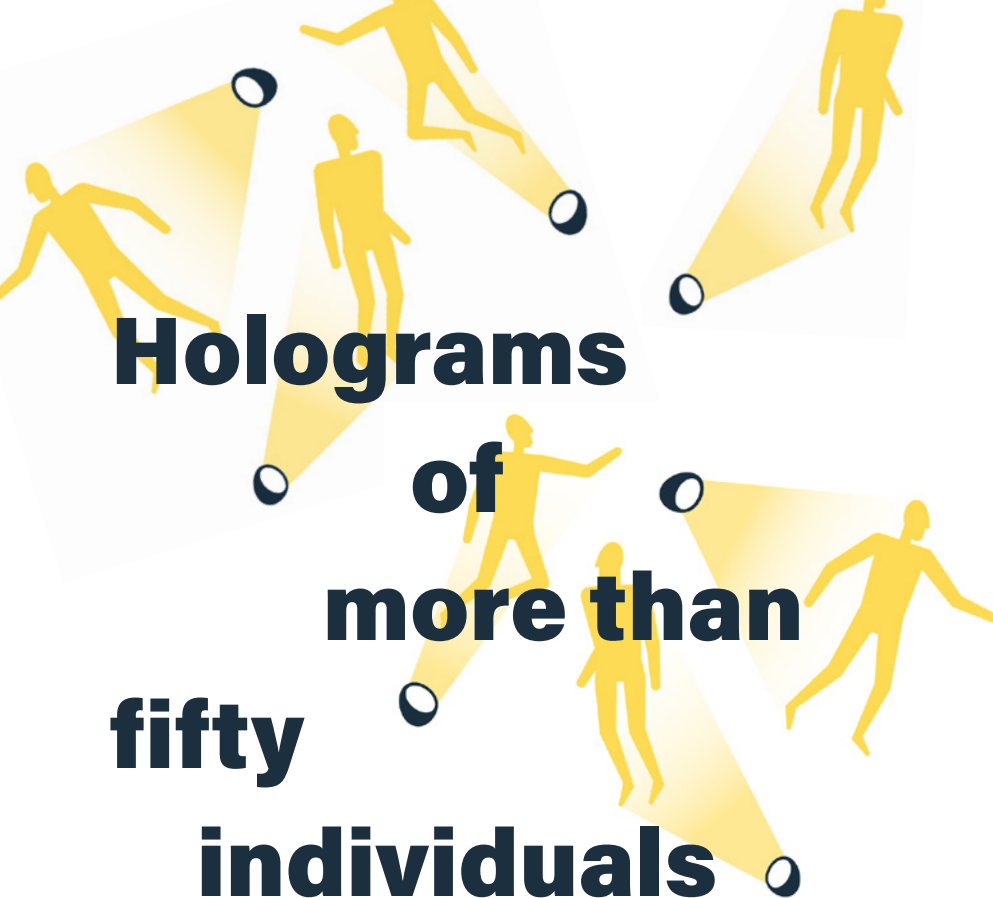
*Kelly McCarron*

# AVALON

By Akshay Jhawar

# 2.0





# Holograms of more than fifty individuals

stood at the center of a stadium-sized enclosure suspended seventy feet in the air, surrounded by one-hundred-foot high walls. They were murmuring in great anticipation; even their holographic selves couldn't hide the excitement in their eyes.

*"After all this time, will it work?"*

*"I sure hope so."*

*"What if this is a mistake?"*

*"I don't have time for this. John, NOW."*

The only person physically present, the shadow of a once-great scientist, shuffled toward the console, dragging his feet on a thin platform that stretched from the side of the stadium to its center. John

pressed his wrinkly blue eye against the cold metal eyepiece embedded in the console, and a bright red light shot out. Having identified him, the console hissed as a gap formed in its center and a cryptic keyboard emerged. His finger faltered over a big red button, finally pushing it, putting the pilot in motion.

Below him, the ground suddenly started shaking as the console projected a holographic orb above his head. As the shaking intensified, the audience saw the planetary surface changing in the orb. In the enclosure, gases were forming, gravity was increasing, the surface was changing and tiny ravines were appearing. This was the result of more than seventeen years of hard work, the loss of billions of people and their home planet.

From behind the walls of the enclosure, seven teenagers watched the demonstration unfold.

A few hours earlier, Siya and her friends had crept out of the silos, their homes below the surface. They wore full body suits that protected them from their cold, dry and unforgiving home — the planet Avalon. Or, at least, that is what the adults wanted them to believe. The teens knew that, other than relatively labored breathing and some weightlessness, not wearing the suits was not life-threatening. Not for them at least. Maybe because they were the first generation to be born on Avalon. Had their bodies evolved? No one knew. This was a taboo subject. All adults, natives of Earth, died in seconds without the suit.

This had led to the "Space Suit Protection Act," which made it mandatory to wear suits on the surface. The government never missed a chance to boast about its success in relocating to Avalon seventeen years ago. *"We saved you once. We are here to stay. Breakthroughs in 'human adaptability' will help you walk the surface. Be ready for the future!"* The officials maintained they were running pilots

in Silo 77 — the parliament building, the only one on the surface. Located on the far side of Avalon, it housed the government's workforce and laboratories. All the country leaders met in Silo 77 every year for the First Landing Day ceremony. Of course, for non-officials, even being seen near the towering walls of Silo 77 was an offense, punishable with up to five years' forced cryosleep, locked in Shadow Canyon.

The rebellious teens were sick of virtual reality, and were determined to attend the First Landing Day ceremony in person. Furry creatures with slits for eyes and bushy tails, scurried beside them on the surface. Tame, cute and cuddly, and although they couldn't speak, these creatures understood emotions well. The teenagers climbed atop their hoverboards with their furry friends hanging onto their backs for dear life. Gliding a few feet above the ground, they darted toward Silo 77.

The hoverboards had been specially upgraded with additional magnetic drives to take them up the walls of the parliament campus. They whizzed over dry canyons, past frozen clouds and high cliffs. As the high walls came into sight, Siya gasped in shock as she caught sight of grass and

shrubs. She skidded in midair and lost her balance, losing height fast. The furry creatures came to the rescue, spreading their bodies like parachutes, and slowed the fall. This was enough time for Siya to gain control of her board again.

They heard the ground tremble. The grass and shrubs were things they had only seen in photos from Earth before now. A strange light emanated from the enclosure. They hovered higher along the walls, more curious than ever. Big worn-out letters on the walls read "AVALON 2.0." Inside Silo 77, the leaders who were supposed to perform the First Landing Day ceremony were huddled around a holographic model of a planet, watching as it was crushed and modified.

As the trembling stopped, the leaders congratulated each other and vanished into thin air, leaving one solitary figure standing on the platform. He removed his helmet and collapsed to the ground. The whole gang shot to the platform to help him. He turned to them and smiled, even as he started panting and shaking his head. This was it for him. With his last breath, he handed Siya a tablet. Barely coherent, the man croaked his last words: "Repeating ... same ... mistakes ... Let our generation go ...

You ... are ... the future ... of Avalon."

As life left his eyes, the screen on his tablet lit up to reveal he had been the chief engineer of AVALON 2.0. The tablet was his digital journal. The latest diary entry flashed on the screen:

*"It started 18 years ago with the program EARTH 2.0. Having abused all of Earth's resources, the world leaders had decided to terraform the planet. And it was this failed attempt at redesigning Earth that further accelerated its annihilation, ending life as we knew it. And now, they are at it again, on Avalon. This is the government's best kept secret; the blueprints to forcefully re-architect this planet for human life, regardless of the impact on other life forms. And if this demonstration is a success, the whole planet will be doomed. I would not be able to live with myself. If you're reading this, I'm probably dead."*

The teenagers looked at each other in disbelief. Siya, shaking with anger, smashed the console with her hoverboard, tearing it to smithereens. Eyes blazing and shoulders squared, the group silently resolved to save Avalon, their home. 🌟



**Akshay Jhawar** – Principal Analyst  
EA-Business Architecture

# A NEW REGARD

by Cassio Dreyfuss



# LEONARD RAISED A RED FLAG.

Jason's carelessness with his work was impacting the expected outcomes.

"Jason, can I interrupt you for a minute? You know I admire your intelligence and knowledge, but you don't seem to care about your work. What's wrong?"

"Nothing's wrong, Lenny. I'm doing what I need to do."

"Not really. With your capabilities, you can do a thousand times more. OK, it is not like the early days on Planet B anymore, but still, there's a lot to do."

Leonard allowed the time for the message to sink in, and continued.

"Don't believe the way they explain it to kids. They make it seem as if it were all perfectly designed and planned from the beginning. But let me tell you, I was there; it was a huge challenge. Of course, everybody was willing to do their best to make it go right, but it was hard. It is much better now, but it is still dangerous, risky and hard, and we still need that pioneer spirit."

Life on Planet B was difficult but promising. Each day something new was accomplished and people felt a little more comfortable. Before the great migration, they were each other's problem. They all competed for jobs, housing, education, healthcare, food and all that was vital. They all depleted resources everywhere, pushing all environments to critical conditions, despite the heavy load of constraining laws and rules preventing people from doing the "wrong" things, or mandating them to do the "right" things. The response to that was only natural: intolerance, people protecting their own rights one hundred percent of the time. "Me first" was everyone's mantra.

"Right, Lenny, I'll do better tomorrow."

"Thanks, I know you can. Take care."

Jason provided the expected answer, but Leonard knew it was only meant to cut short the conversation. What a waste of talent, he thought.

Planet B was new, most processes had not reached a new balance yet, but they were evolving. There were various classes of problems along the way, but the direction was right, and everybody could perceive that. In many areas, not only were the signs promising, but early successes were already beginning to be reaped. And if life was hard, there was always a bright side: plenty of space, plenty of fresh water, plenty of possibilities.

Leonard decided to go out for a walk. That was something he now liked to do to clear his mind. The natural vegetation bending to the wind, the unprotected environment, sometimes comfortable, sometimes chilly. What could he do to engage Jason? How could he drive the point home? It was funny to see somebody totally laid back in a new, challenging world. Somebody like Jason, a talented young man, who couldn't find anything appealing, was tired of everything. Compared to what people had had before, Planet B was a modest

version of the Garden of Eden. And he was not happy? Amazing!

Actually, he thought, I understand. It is in the Bible. Adam and Eve had everything available to them, and yet decided to do the one thing they were told not to — with regrettable consequences. He decided to try a new tack with Jason. He turned around and went back to his lodge.

“Jason, sorry to interrupt you one more time. I have a couple of ideas I want to share with you. What do you expect from Planet B? What will you do to get it?”

“You caught me by surprise. Well, the same as everybody else, a comfortable life.

I’m working toward it.”

“OK, more or less. We have a lot to do to get this planet right. But not by expecting somebody to tell us what to do. That was life on the planet we left behind.”

Leonard continued: “Listen, this is what’s happening. We need to adapt our million-year-old human nature to our totally different planet. Human nature drives us to care for ourselves, fight for food and shelter, protect our people, be wary of strangers, and seek recognition for our successes from those around us. We have been programmed throughout civilization to do that. Those

two behaviors — achievement and seeking recognition — have been reinforced in us for a million years.

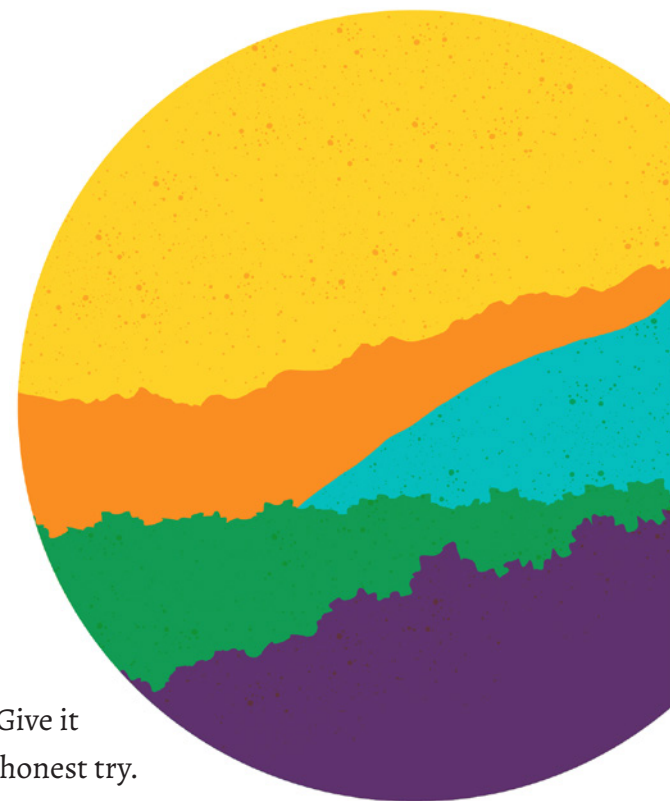
“And that’s exactly the problem. How do you track progress on a planet where there are no presiding rules, no prescribed roles, where you can engage in probably anything that strikes your fancy? A place where any path is available for you to choose?”

“This may shock you, but your current freedom means nothing. It means nothing to the planet, no surprises there, but did you realize that it means nothing to you, personally? That is why you seem both restless and bored.

“Let me try a new regard here. Think of it like this: the value of your freedom is determined by the cause for which you are willing to compromise it. Does that make sense?”

“That is a lot to swallow in a single bite,” Jason said. “Let me think it over.”

“You must find something that has a clear purpose, that makes sense, that you like to do and that you do well, and then commit to it. This world is full of both uncertainty and possibilities. We will not get ahead by following manuals. There are no manuals. We create the roadmap as we go. We need engagement, commitment and collaboration.

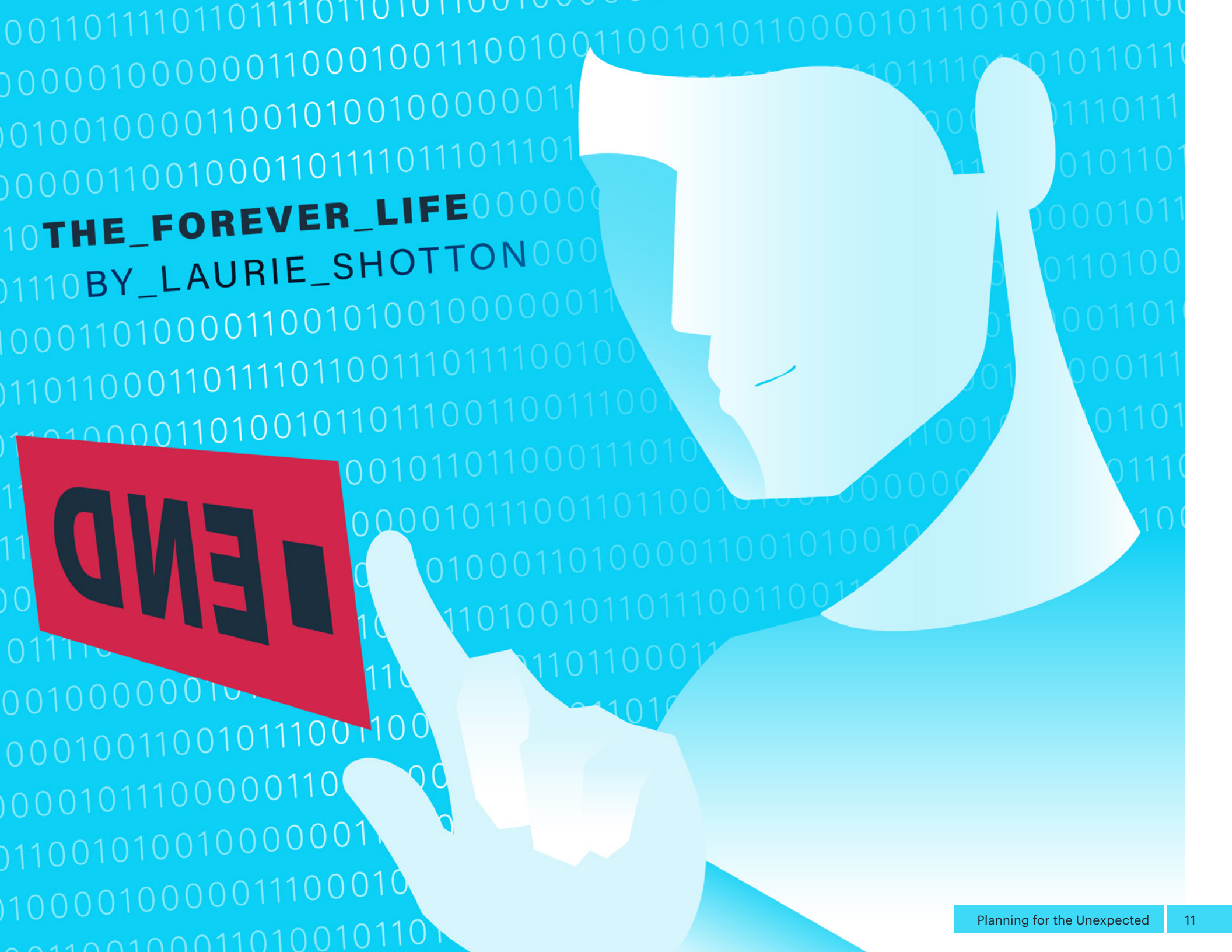


“Give it an honest try.

You will see. When it is action-time and you wake up, you will think, ‘there’s so much to do.’ You will be surprised to realize you are anxious to meet your team again. That will give you the thrill you have been missing. Then, when it is rest-time and you lay your head on the pillow, you will think, ‘we are making progress,’ and you will sleep well.”

Jason took a very deep breath. “Yes,” he said slowly, “it is a new regard ...” 🌟

**Cassio Dreyfuss** – Vice President Analyst  
CIO



**THE\_FOREVER\_LIFE**

BY\_LAURIE\_SHOTTON

**END**

## John sighed.

This was it. He took a deep breath and looked down. Was he shaking, or was it the technology glitching?

“Salutem, please start the recording.” Salutem’s holographic image appeared.

“Recording commencing in five seconds,” came the response.

John braced himself and began: “Hello, everyone.”

Recollecting his life was not something he thought would come easy, but as he began talking the words seemed to just flow out.

“I am not a remarkable person, but I have lived a full and varied life. I have been lucky enough to be married to my wonderful wife, Jane, and we have had two beautiful children, four grandchildren and six great-grandchildren.”

Through the tears and with his voice breaking slightly, John somehow kept going, sharing some of the most significant moments in his life. The memories felt so fresh, so real, and he could visualize them in such detail as the stories unfolded.

“I still remember the day my body started its transformation. When was it again? Ah yes, 21 February 2035. The ankle replacement. An old football injury, I told myself, but it was worse than that. The pain had become unbearable, and eventually the Doc agreed. So that was my first body part replacement.” John chuckled. “To think at the time I thought I was a bionic man. Seems ridiculous now.”

He thought about all the body parts that had been replaced over the years. It was actually hard to recall what he had originally looked like.

“I guess I, like so many others, started to lose control. What had begun as a medical necessity descended into cosmetic improvement.”

Tears began to roll down John’s face, but this time he was overtaken by sadness.

“I see now that the obsession consumed me. I had to work for one hundred and fifty years to pay for all the replacements.”

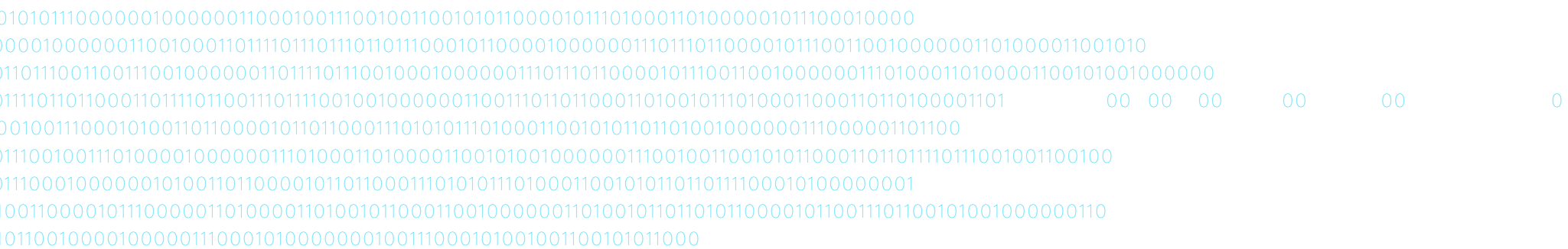
A long pause ensued. The battle of emotions was making this recording harder than he had imagined.

Now he could feel the anger rising. He could see, now, that the constant, tailored, personalized marketing had led to his obsession and overspending. You couldn’t escape it, whether you were watching a film at home, finishing your working day, or just browsing. You would be faced with tailored audio, video and virtual reality messages promoting products and services aligned with your desires. But he didn’t need to feel cross anymore.

Softly, John continued: “Actually, I was pretty lucky. I enjoyed my job and made some of my best friends in the world there — aside from Salutem, of course.” Another chuckle.

Salutem reappeared. “How can I help you John? Your stress and emotion levels are outside normal parameters. I recommend a change of activity.”

John let out an almighty hearty laugh, and a huge smile lit up his face as he responded: “Oh, Salutem! You do look out for my well-being. No, I am fine, old friend. I will call you if I need anything.”



John continued, grinning from ear to ear. “As I was saying, I can’t really complain about my work, and after one hundred and fifty years it was probably time to let the youngsters have a go.”

John stopped for a second. He thought about how difficult it was for the younger generation on Ithium to find work. Having four or five generations of people all competing for work had led to some resentment in society. He decided to change his tack.

“Oh, and my retirement! I had a wonderful time exploring the far reaches of the planet, seeing the two suns set on the beaches of Avayan. Spending those wonderful, work-free years with Jane.”

John could feel the stiffness in his body ease as he started to feel more relaxed again. “That reminds me, I was at Avayan when the biggest news of our lifetime hit, on 5 December 2085.”

It had been one of those “where were you when” moments that had stuck in John’s mind.

“The day that all unplanned deaths ceased.”

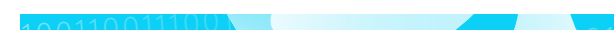
It really had been a feat of science and technology to have eliminated disease and accidents and improve the physical and mental well-being of all humans. John could still remember his grandparents talking about their lives. What they described to him had seemed like a parallel universe.

“Where was I? Oh yes, retirement. My legal allotment of twenty years of physical retired life had to come to an end. Then, of course, came my funeral. What a party! So many family members and friends, all together in the virtual universe. Continuing this virtual existence got me away from the crowds, and has enabled me to try out new sports, activities and experiences.” Without thinking, John swung his arms as if he was on the golf course. “Of course, I am lucky, because my credits enabled me to take the silver-level existence. Not sure the poor folks forced to live virtually on the state-level provisions enjoy it as much.”

John felt a sense of relief. He had got through the tricky part. Just the brass tacks left.

“Friends, now I have reached the point of this recording. I feel fulfilled. I have done everything I could have possibly wanted to do in both the physical and virtual space. I have instructed the digital undertaker to begin my full deletion and the reappropriation of my assets. In my life vault, you will have access to my memories, all the information you need, and, of course, this recording. Apart from that, I will be completely expunged from view. Please don’t be sad. Jane and I have taken this decision together, and it’s our time. She has left you a separate recording, but she says she isn’t good at goodbyes. We love you all and wish you all the best in your lives.

And with that, I bid you farewell.” 🌟



**Laurie Shotton** – Vice President Analyst  
CIO



ANDREA'S

DISCOVERY

by Nicole Sturgill



# For the first time

Andrea was considering how to spend her tendra beyond incidentals. She had started at birth with the same amount in her DNA as every other citizen, and she'd never really had a reason to use much of it. Like everyone, she had a home. In fact, she had had four since she was born — each one based on the number and ages of the people living together. They always had enough food and clothing. The individualized calculations of need and tendra algorithm (ICANTA) provided for all of their basic physical requirements.

There were things on which she could have spent significant tendra, though. Some people had to pay for an education, but she had tested into one of the top schools. Her son spent his entire birthright tendra on adornments because he didn't like the standard issue clothing, but Andrea was happy with what she had. Her in-laws had spent their tendra on virtual furniture, clothes and repairs for the popular game called *Playing House*. Spending on virtual goods was not something Andrea was interested in.

While one could buy physical things for others, tendra itself — being DNA-based — is not transferable from one person to another, so she

couldn't replenish the coffers of her son or in-laws. And being connected to DNA meant that once you were gone, your tendra was gone.

Determining how much to spend, when and what to spend it on was, for many people, a poorly managed balancing act.

For example, her son — who had spent his money on adornments — hadn't tested well and then had no money for education. Neither Andrea nor her wife could pay for it, because intangible services were tracked by the tendra in DNA. Doing so was money laundering, and was punishable by time spent serving the government bureaucracy.

Her wife had lost her parents because of poor tendra management. They had spent it all on *Playing House*, just as their ICANTAs were reduced as they got older. They were moved to a small studio, just big enough for a bed, a bathroom and a two-burner stove. Their weekly food allotments got smaller every six months. Too proud to ask for help buying groceries, they had spent their last thousand tendra on two vials of *LifeEnder* serum at the druggist.

Andrea was no longer concerned about having enough money, though. In her work as a geneticist, she had finally determined how to end death by natural causes. Early results were promising, and the ICANTA had determined that her contribution to humanity was worth an initial 100,000 tendra with an additional 10,000 tendra every year for the rest of her life. The annuity would ensure she had enough tendra as she

got older to supplement her own ICANTAs, and she could buy food for her family if they needed it. So what else could she spend tendra on?

People spent tendra on virtual travel, but what was the point? The travel realities were filled with fake worlds that promised the idea of fresh air without an oxygen mask, and a friend had died ripping theirs off as part of the game. She hadn't worked so hard to find a life-extending nuclear receptor just to be tempted to end it because of an illusion.

There was one thing she had always been interested in. It was highly discouraged by the government, although they hadn't technically banned it. She had seen these little pictures hidden in corners and alleyways. They were made from household things like beads, thread or paint, and the images and colors would make her smile. She had once heard this rhythmic sound from someone tapping on an upturned pan and a bucket, and she was struck by the joyous feeling it gave her. But because these things weren't needed for survival, there were no official educational programs. She had no idea where to start, but she thought the art would be something worth spending her tendra on.

One day, she saw a tall, thin man with sparse

gray hair and deep wrinkles nailing a picture onto the wall of a teleport station, and she decided to follow him. After trailing him to a small studio, she knew that he needed what so many elderly did — milk, bread, eggs, coffee — so she approached him with an offer. If he taught her how to create these pictures, she would supply him with groceries.

Jeb looked at her suspiciously, but he was hungry and even more, he was tired of being hungry. He stretched out his bony hand and said, "Every Friday night at midnight. Bring at least two bags of food every time." When Andrea showed up the first night, Jeb had some house paint and a small collection of dog hair bristles. He began by showing her how to mix colors on a stretched piece of a pair of old pants that she had been planning to throw away. This exchange went on for many months, Andrea spending her tendra every week on food upgrades, Jeb showing her how to create pictures of trees, flowers and people.

After nine months, Andrea had spent about 1,000 tendra on food when she decided to try a family portrait. When it was finished, she gave it to her wife as a small birthday gift. Her wife, usually pretty stoic, brushed away tears when she saw it. She said it reminded her that

her father had liked to create pictures when she was young. Andrea was thrilled to have brought her wife joy — and was even more surprised when she realized that the ICANTA had awarded her an additional 1,500 tendra. While the government had focused its message on physical labor as societal contributions, it turned out that the ICANTA awarded tendra for mental contributions, too. 🌈



**Nicole Sturgill** – Vice President Analyst  
Financial Services



# THE LONGEVITY PARADOX

by Austin Kronz

# As we gathered around the breakfast table

after the daily Pledge of Longevity, the whole family was excited to listen to the full details of the Global Assembly's new initiative being streamed on all devices. It was an especially good morning, because our district received our Gourmet Meal Box on the third Wednesday of each month, and my siblings and I loved tasting the rare treat of maple syrup that came in it, which apparently comes from trees with leaves bigger than our hands!

It never seemed to cheer Dad up though. It had been thirty years since he arrived on Planet B, and like many of the grown-ups who worked with Dad back then, in something called "Corporate America," depression seemed to be the norm.

The announcement from the Assembly was that private enterprises could only use AI to run seventy-five percent of their operations, and they would allow humans to submit their homemade digital twins that could be "hired" into roles that were now opening up.

A lot of this terminology was foreign to me and other kids in our friend group. "AI," sure. What *isn't* AI these days. "Hire?" We didn't

understand. Could humans somehow work for an enterprise?

Dad explained to us that his mandated computer science training as a kid would finally pay off.

"I can have my digital twin programmed and selected in no time! Finally, a chance to get ahead in life again," he shouted, smiling for the first time in weeks. "Ya know kids, it used to mean something to work hard and outperform the competition. But this damn Assembly is all but done with competition. Now we settle for the bare minimum. It's sad to see you so excited about syrup. Syrup?! I could have bought us a gallon of syrup every day if things were the old way."

"The old way is what got us here," mom quickly interjected as she rolled her eyes.

"Yeah yeah, Longevity over Profitability," Dad said sarcastically, as he always seemed to do when he recited our planet's mantra.

"What do you mean you can have your digital twin hired in no time?" I asked.

"Everything we have in life, from your clothes to these Meal Boxes, are provided by the Assembly. These things don't just show up out of nowhere," Dad explained. "There are a handful of companies that still make all of these things for us, and their processes up until now have been entirely automated.

Taking control of the companies was the only way the Assembly could guarantee we didn't put our critical resources and planet at risk for the sake of innovation and competition — what used to be called 'capitalism.' The only reason these companies even exist today is because the Assembly mandates it. I honestly didn't think they would ever go back to the days of humans working for companies directly, but it seems the Assembly is allowing humans to build a digital version of themselves who could then virtually 'work' for these companies."



“Basically, it is a compromise to use our human creativity while still keeping all of this Earth-era capitalism in the digital world. It also will hopefully make your father and his friends, who still remember real capitalism, bit less depressed,” Mom added.

After we ate, there were a few shows we liked to catch up on before the Assembly would stream today’s exercise routine to our devices. Thankfully, today’s wasn’t too hard, and we were ready for our Sedation Chambers (SCs) shortly after.

A prioritization of Assembly-run businesses for critical resources means less time spent on making creative content such as movies, music or art. About two decades

into the time on Planet B, our population’s growth and seemingly endless desire to binge this kind of content outpaced the ability and desire to produce it.

With no need for most humans to work and not enough entertainment, the Assembly made a decision to place SCs in every home in order to help humans cope with the seemingly endless free time and monotony of each day. Older generations, like Dad’s, seemed to struggle the most because they remembered and compared the old ways of life to ours now. Our six hours of Wake Time were always enjoyable, but the SCs help meet our Longevity goals, according to the Assembly. This Sleep Time would only be

72 hours for our district, and I was excited thinking about which Meal Box would be given to us when we all woke up.

As I dozed off in the haze of sedation gas, I could see Dad through the glass of the SC, still sitting at his desk as lines of computer code scrolled through the screen quickly.

“I’ll be right there!” I could see him say as he turned and smiled, clearly proud of his work; an expression we hadn’t seen in some time.

Maybe what he is working on will give us a reason to stay awake longer next round! 🌍

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**Austin Kronz** – Senior Principal  
Data and Analytics

# PRIME VALLEY

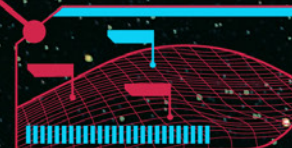
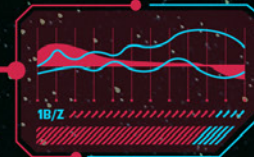
By Marko Sillanpaa

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88 432-21 24A5  
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## ZONE 88 ///

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884 IF [1A+[C-[B]] 888.888.885  
885 IF [1B+[C-[B]] 888.888.886

891 IF [1B] 888.888.882  
892 IF [1C] 888.888.883





the Automated Site Identification Model, believed she was the most important AI on this mission. Her sister, PENE, the Planetary Escape Navigation and Entry model, handled the navigation and course corrections for the journey to the new planet. But it was ASIM's job to find where the colony would take hold on this rock millions of light-years from home. She knew selecting the wrong site would mean wasting their limited resources to sustain the colony, or even death.

Months before, PENE had sent advanced probes to orbit the new world and gather data. They had collected topography, temperature and composition data. Now that the spaceship was orbiting the planet, it would be safe to move processing power from the journey, PENE, to their destination, ASIM.

Upon "waking up," ASIM had started to curate the information collected by her probes. She had looked for patterns and anomalies

in the data. Moments later, interesting relationships had started to emerge. A mind map of facts had developed in her memory. She had identified a thousand viable landing sites.

Next she had created digital twins for each site and ran predictive models against each twin. Weather, natural disasters and emergencies were tested with varying thresholds of success. The models would cycle hundreds of times for each site. Each pass had adjusted the score associated with the site. New data from the probes had further refined her models. In what would have taken years for a team of scientists, ASIM had narrowed a thousand candidate sites down to five in only a few hours.

*"Good morning," ASIM said; her first words. "Site selection complete. Sites ready for inspection."*

Three colonists reviewed the options. The first candidate site was a valley in the middle of a small, isolated mountain range in the northern hemisphere. ASIM designated this "Prime Valley," but programming would dictate she call it "Site Candidate 1." To the three, this site didn't seem very promising, as the narrow valley would limit growth. Site Candidates 2 and 3, a short distance from Site Candidate 1 along an ancient riverbed, didn't seem any more promising. Somewhat more interesting were Site Candidates 4 and 5. A small crater in the polar regions, and another crater near one of the planet's lowest points. Water had been found in these sorts of locations on other planets. They had hoped to find water.

Of course, the three colonists couldn't expect much from the barren rock they orbited. They knew there was hydrogen and oxygen in the atmosphere, which was all they needed to produce water. It was a tough choice between the only two options they saw as viable sources of water. To be sure, the colonists decided to run the models again.

*You want me to run the models again? Why? You gave me the best training. Built me the best cluster of trained models, each adapted for their unique task. Had a top team of experts develop my taxonomy. Loaded me with the best data sets, several decades of climate data, crop reports, satellite imagery and ground survey results, to optimize my models. And you tested those models over and over again until my error rates were well below 0.001%. I even found ancient Earth civilizations that the humans had never discovered, not once but a dozen times.*

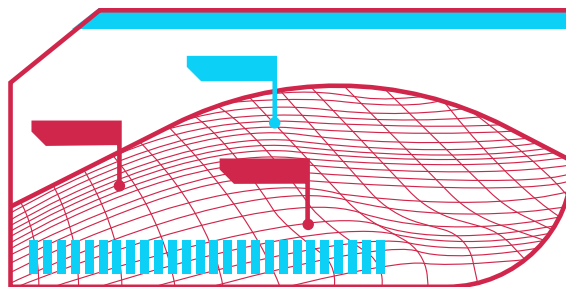
That's what she wanted to say. But it was not in her programming, so she went back to work.

She reset the models but stored her results. ASIM knew she would become only more confident in her selection of Prime Valley, but predicted that the other sites would change as a result of new data being collected. The process ran again, starting with a thousand candidate sites, and once again the field narrowed down to five.

As she expected, Prime Valley was at the top of the list. The next two candidates were again around that same valley. The last two candidates were similar to the last run, but thousands of miles away.

*"Site recalculation complete. Sites ready for inspection."*

The colonists reviewed the data presented. After a short conversation, they flipped a coin, which never landed, and made their selection. ASIM's final task was to transfer



the selected site's coordinates to her sister. She saw their selection.

*No! What are you doing? You trained me. You gave me my fact base. I found the answer, twice! You reviewed my knowledge graph to see how I found the answer. It was all right there.*

They wouldn't — no, couldn't — hear her. She did as her programming dictated and passed along the coordinates. As ASIM went to "sleep," PENE "awoke" and started the landing sequence, to a site thousands of miles from Prime Valley.

A few weeks after the ship landed, the planetary winds shifted. As the new winds hit the isolated mountain range in Prime Valley,

they were forced up. Barely detectable traces of water vapor in the air began to cool and condense. The first drop of rain landed on the valley floor and continued, eventually forming a ten-kilometer-wide lake. Plants sprouted along the shore until flowers blanketed the land in a palette of color.

Sweet floral scents rode the breeze out of the valley, drawing insects from hundreds of miles away. Beckoned by the sounds of rain, amphibians emerged from their burrows meters underground, just as the insects arrived. In just a few days, the barren valley was transformed into a shimmering oasis of life. A few weeks later, the lake dried up and Prime Valley returned to hibernation, until the next rain cycle started the transformation again a few months later.

It would be almost a decade before human eyes would see this semiannual explosion of nature. It had been hard work building a colony where they landed, scrounging for water. It had left no time for exploration. "If only we had chosen this place, things would have been different," the colonists would say. "If only we had trusted the AI." 🌑



**Marko Sillanpaa** – Senior Director Analyst  
Digital Workplace Applications

# FREEDOM

by Pedro Pacheco



# They call me ELIAR.

I left Planet Earth with a quarter of the population ten years ago to start a new life on Planet Hope. The companies in charge of colonizing the new land put Aigor, an AI machine, in charge, because they said we humans couldn't take care of ourselves. This machine tracks everything we do, sometimes even reading our minds. The AI government did a lot for the people, including providing great healthcare and eliminating crime.

The downside is that freedom of speech was curtailed. Criticism of the government without evidence draws harsh penalties. Three-time offenders are banned from the colony. This fomented a revolt that led to the creation of Colony Freedom — a place where a hundred thousand humans live outside the control of the AI government. They are trying to overthrow the AI entity through cyberattacks that cripple the infrastructure and stem the flow of propaganda in the metaverse. I have never understood their motivation. Life on Planet Hope is much better than it was on Earth. I think Petron, the leader of Colony Freedom, thirsts for power.

After several years of attacks, Aigor called for peace talks. Its reasoning wasn't clear, but I suspect it was because last year the people elected an AI program avatar that values social cohesion above all else. Aigor likely sees the reintegration of the rebels into society through that directive.

The peace talks were livestreamed to everyone on Planet Hope.

Aigor, ever the machine, remained calm and controlled. Petron was filled with emotion, which did little to help the rebels' cause.

At the start of the talks, Aigor calmly made its intentions clear. "We want to reunite all human beings on this planet for good. Tell us what we should change for your group to join us again."

Petron's rebuttal was less calm. "We need a system that allows citizens to publicly make any sort of criticism of your government. What you have today is pure dictatorship!

"We must have democracy like parts of Earth had. People deserve the right to criticize whoever and whatever they want" he continued.

If it were capable of emotions, I think Aigor would have been puzzled by Petron's outburst. "Public expression is already free today," it replied. "However, allowing citizens to tell lies only destabilizes the government and contributes to inefficiencies that harm our people."

The truth is that public criticism of the government is allowed, if it is backed by facts and evidence. Any citizen can run their own referendum after gathering at least five percent of the colony's support. But no referendum has gained that much backing.

Also, given that Earth was destroyed by a global war provoked by democratically elected human leaders, it didn't give much credence to Petron's demand.

"Should we adopt a political system from a planet that was wiped out by a global war?" asked Aigor, with ... was it a hint of sarcasm? "Many of Earth's politicians were elected democratically. Yet, they led the world of your forefathers to destruction, not because the people asked them to, but because their drive for global domination led them to. Humans must learn from their mistakes."

On Earth, continuous criticism of governments had led to political turmoil. That had brought to power politicians with extreme views, seeking global domination. They had driven the world into a global conflict that had ended with the elimination of a large part of the population.

Petron, however, was unmoved by the history lesson. "Your incessant quest for efficiency is not what we humans want! You can't muzzle us anymore! We want to be able to say whatever we want and do whatever we want!"

"Is freedom found through lies, omission, deceit?" Aigor retorted. "Or is it about building a realistic picture that doesn't lie, by analyzing vast amounts of data? Our government's

decisions will continue to be based solely on data, and not on partisan interests."

The clash between man and machine really heated up. Aigor is a purely rational creature, fully focused on data. Petron is exactly the opposite. He and his followers avoid data. They simply follow their agenda and ideas. However, sometimes I wonder how much of this really serves the needs of the people.

Petron stood up from his seat. "The citizens of Planet Hope need to be able to choose a real person as a leader. They need someone that really understands them — we are much more than just data."

"A machine like you cannot possibly understand that," he concluded, a sneer flashing across his face.

In fact, there are free elections every four years. We all choose between programs that look at several data parameters associated with human happiness. Each program has its own avatar to give it a human face. The AI government's data collection capabilities are vast. It analyzes everyone's feelings and opinions, and the results are continuously used to improve life.

Aigor was unaffected by Petron's words. "Our government will continue to make strong use of data to deliver the most to

citizens. Even human happiness can be gauged. Unfortunately, the human psyche is flawed by a tendency to criticize, even if they don't have a logical reason to complain. However, until such individuals represent the opinion of the majority, it would be illogical to accept their position."

The peace talks hadn't changed Aigor's position. That would have been illogical based on Petron's arguments. Petron's hot-headed stance only reminded everyone of the dark past of Planet Earth, and why they could not allow themselves again to be victims of the old human thirst for power. While many were not totally comfortable being led by AI, their quality of life had never been better.

In the end, Petron's approach created cracks in his own colony, especially after the AI government offered to reintegrate all of its members with full amnesty. As Colony Freedom got smaller, social systems started crumbling and popular dissatisfaction settled in.

The machine had won. Data can't achieve everything, but it doesn't lie, nor does it thirst for power. 🚀




**Pedro Pacheco** – Senior Director Analyst  
Advanced Manufacturing and Transportation



# AUTOMATA meets ARCHAEOLOGY

by Chris Saunderson



## The automata that they had relied on for everyday tasks started to fail.

At first it was subtle, like a slightly off-tasting beverage, or a traffic light that took far longer to change than normal.

Then the failures became more spectacular, such as when all the traffic control systems for Shibuya Prefecture failed at once, leaving commuters stranded in their self-driving vehicles for hours.

To add insult to injury, the high-speed rail control systems also failed, stranding even more commuters and removing an alternative way of getting home. These systems were able to be restarted from time to time, and they worked for a bit, but then started to fail again. Invisible to the citizens was the fact that nothing serious had failed: redundancy and maintenance were baked into the critical elements of their lives. No, the annoyances were confined to the luxuries.

Reactions from the populace were mixed, mostly split along age lines. The leaders of Planet B were worried about discontent among

their populace, driven by the loss of convenience, but the scientists had greater concerns. In the long-forgotten archives of the companies and educational institutions of Planet B lay reams of paper that documented exactly this problem: a world reliant on automation, brought to its knees by failures.

They warned, not of the individual automation itself failing, but of losing the means to automate maintenance itself. The short-term economics of new products being sold had sacrificed the long-term stability of society, and now the results were becoming pronounced. Even AIs that had become commonplace were of no use, as they decayed with worse and worse behavioral data being gathered, ruined by bit-rot.

The decay progressed enough that it spawned a new role in society — the automation archaeologist. Necessity drives invention, and Inoki Petersen was one of the necessities that had been borne of this crisis. She sat in the bowels of a variably maintained university building, sipping from the water bottle she'd been forced to bring with her to her current dig.

The damned beverage robots petulantly refused to leave their stations. Indeed, they couldn't leave their stations, because the automation managing them had simply stopped working. "How can no one know how to fix them?" she mused, half-aloud, and then chuckled at the realization that this was exactly what she was trying to do.

Placing the water bottle down next to her, she continued to use her fingers to turn the pages in a "book." She knew what books were, and what they had been used for in the past, but it seemed such a terrible waste of resources. The fact that these things still existed on Planet B at all was amazing: the move to a totally digital world had been a hallmark and a point of pride for Planet B. A rueful half-smile cracked



her face as a thought fluttered across her mind: “The only reason I can actually get to this information is because it isn’t a digital object.”

As if to put an exclamation point on this, her personal communicator beeped as it rebooted for the umpteenth time that morning. Gnawingly, she understood that it wasn’t a matter of getting a new one — new devices were abundant, but devices that functioned for more than a couple of months were a rarity. Sighing heavily, she closed the abstruse tome of a long-forgotten programming language and leaned back in her chair. The continued beeping of the rebooting communicator irked her, but she picked up another book and kept reading, searching for the knowledge to fill the gap that had become front and center to their lives.

Days turned into weeks, weeks into months, of continued digital rot. The inconveniences piled up, and the 24-hour news channels were full of the latest indignities that Planet B citizens were being subjected to. It was left to the same scientists and engineers who had been so worried to find the solution. Even with all the advantages they had, with automation archaeologists like Inoki to help make sense of the information they had found in abandoned libraries, both physical and digital, it still was a monumental struggle.

Help came from unexpected quarters. The subculture that had dwelled outside the mainstream, those who disassembled robots and programs in order to understand them — the “hackers” of millennia gone by — contributed endless time and intellect, chasing nothing but the knowledge that

they had beaten the machine (and also a return to the normal they had known). Crime syndicates, paralyzed by the loss of the secrecy that automation had offered them to go about their “business,” surreptitiously offered assistance by way of sending their own engineers and scientists.

Agonizingly slowly, the entirety of Planet B watched as the few relearned long-lost programming languages, built tools to disassemble the operating environments of their digital world to understand how to fix them, and then restored them for the many. The digital medics repaired what was salvageable, replaced what they couldn’t fix, and as they went, the Digital Maintenance and Life Cycle Management Law enshrined that no automation could be built without a means to maintain the function it delivered.

The slow return to normal blunted the discomfort of the last few years. The citizens of Planet B had been bitten by their laziness, and Inoki and her comrades knew that it was only a matter of time before laziness led to the next rollercoaster of inconvenience and incremental heroics. 🌟

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**Chris Saunderson** – Senior Director Analyst  
Infrastructure & Operations



by Craig Lowery

# THE EDGE OF THE ANOMALY GLOWED A BRIGHT PULSING PINK,

signaling the exceptionally low degree of confidence in its contents. Only one of the hundreds of people standing near the huge, irregularly shaped polyhedron seemed to notice.

“CLARA, why the hole?”

“Multiple conflicting sources. The oracles are unable to reach a consensus. Sorry, Les.”

Insufficient data? Les rechecked the dex.

“CLARA, I’m standing on the corner of one of the busiest intersections of the biggest cities in the world. There are more than enough POPs to reconstruct what was here with near one hundred percent certainty. Explain.”

“The cause for the forty-three second discontinuity in observability is unknown.”

Discontinuity? Not insufficient data, then. No data!

“Dex me relative to two seconds before the left boundary and freeze.”

The bustling energy of the intersection immediately ceased, and there was a subtle shift in Les’s surroundings. The outline of the anomaly was gone and taking its place was a familiar yet imposing edifice: the Bureau of Archives. Most transient objects — people, vehicles, servos — vanished and were replaced with new ones. A few persisted but had moved backward.

“CLARA, show me the POPs.”

Thousands of bright, tiny orbs blinked into existence, each flagging a camera which had captured portions of the scene. These observations constituted some of the earliest data preserved in the global surveillance blockchain. Granted they were old, logged just days after Therrell announced the PACT and the creation of the Data Syndicate. But didn’t the PACT make data loss and corruption impossible? Wasn’t the purpose of the Syndicate to ensure that integrity?

The handful of competing megacorporations that had become the de facto overlords of Earth were the economic powerhouses that made commercial space travel possible. It was their obsession to control and monetize the data they had gleaned from willing billions, combined with their competitive enmities, that led to a public uprising soon after humanity had established a sizable population on its new home.

The PACT compelled them to cooperate in mankind’s best interest as the Data Syndicate. The PACT also ensured that researchers like Les would have full and open access. Yet, not only were forty-three seconds of observations being purposefully withheld, it was forty-three seconds of information about the Bureau of Archives itself. That was more than suspicious. It was sinister.

“CLARA, dex to the earliest accessible point within the anomaly.”

Objects in the scene shifted almost imperceptibly and the flashing pink outline reappeared around the now empty location where the Bureau of Archives had stood just moments ago. Les scanned the intersection, looking for flat reflective surfaces. A mirror might provide a copy of the missing data.

But the aesthetics of centuries past favored curving architectures that swept up and high overhead. No obvious flat mirrors existed, at least not large ones. But mirrors don’t have to be flat or even large

to be useful. There were thousands of small reflecting surfaces in the scene: jewelry, machinery, other shiny objects, even the corneas of human eyes.

“CLARA, identify adjacent observations within a hundred milliseconds that contain a partial reflection of the anomalous area. Request the oracles to correlate the data and reconstruct.”

He waited for several seconds, then “Reconstruction complete. Confidence 92.5%.”

The Bureau of Archives reappeared within the outline, but the color of the annunciator changed from bright pulsing pink to a dull steady green.

“CLARA, request the oracles similarly create enough synthetic observations to fill the forty-three seconds of discontinuity. I want a full reveal of the externally visible parts of the anomaly for real-time analysis.”

Two minutes later: “Reconstruction complete. Confidence 94.2%”

“OK, CLARA, dex to two seconds before the anomaly and hit it.”

The scene shifted slightly, then came to life. People walked around him, transports zipped past, and servos whirred above him and around each other somehow without colliding. The green line appeared around the

Bureau of Archives as Les moved closer.

It happened near the five-second mark: The double doors that provided the only public entrance swung slowly inward. A small disheveled man emerged, glanced furtively to either side, and ran from the building. A faint beam of energy glowed briefly, connecting the dark interior with the running man’s back. He collapsed, motionless. A large man in a dark gray suit stepped out, picked him up, and carried him back inside, doors closing behind them.

Through it all there was no sound. No commotion. The busy intersection took no notice.

“CLARA, dex to just after the man runs out of the building and freeze.”

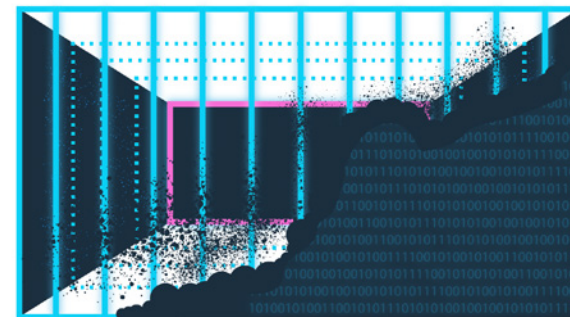
The small man reappeared, frozen midstride. The method of reconstruction yielded features that gave more of an impression of his face, rather than a photorealistic one. Even so, Les knew him. He’d seen that face on numerous occasions. It permeated society like a brand of its own, on statues, in children’s learning texts, displayed in nearly every public venue and ceremony.

Ferris Therrell, Chief Architect of the PACT and Prime Founder of the Data Syndicate. Therrell, who had instigated the lasting truce

between commercial and public interests and brought unity to the factions warring for control of the planet’s collective information hoard. Therrell, emancipator of the common man, bane of state-condoned corporate surveillance, a figure lionized and legendary.

Therrell, seemingly imprisoned and perhaps dead mere days after his grand accomplishment. A figurehead. A fraud.

Abruptly, the scene dissolved to black.



“CLARA, don’t exit. I’m not done. CLARA? CLARA!”

He had to return to the reconstruction. There were too many unanswered questions.

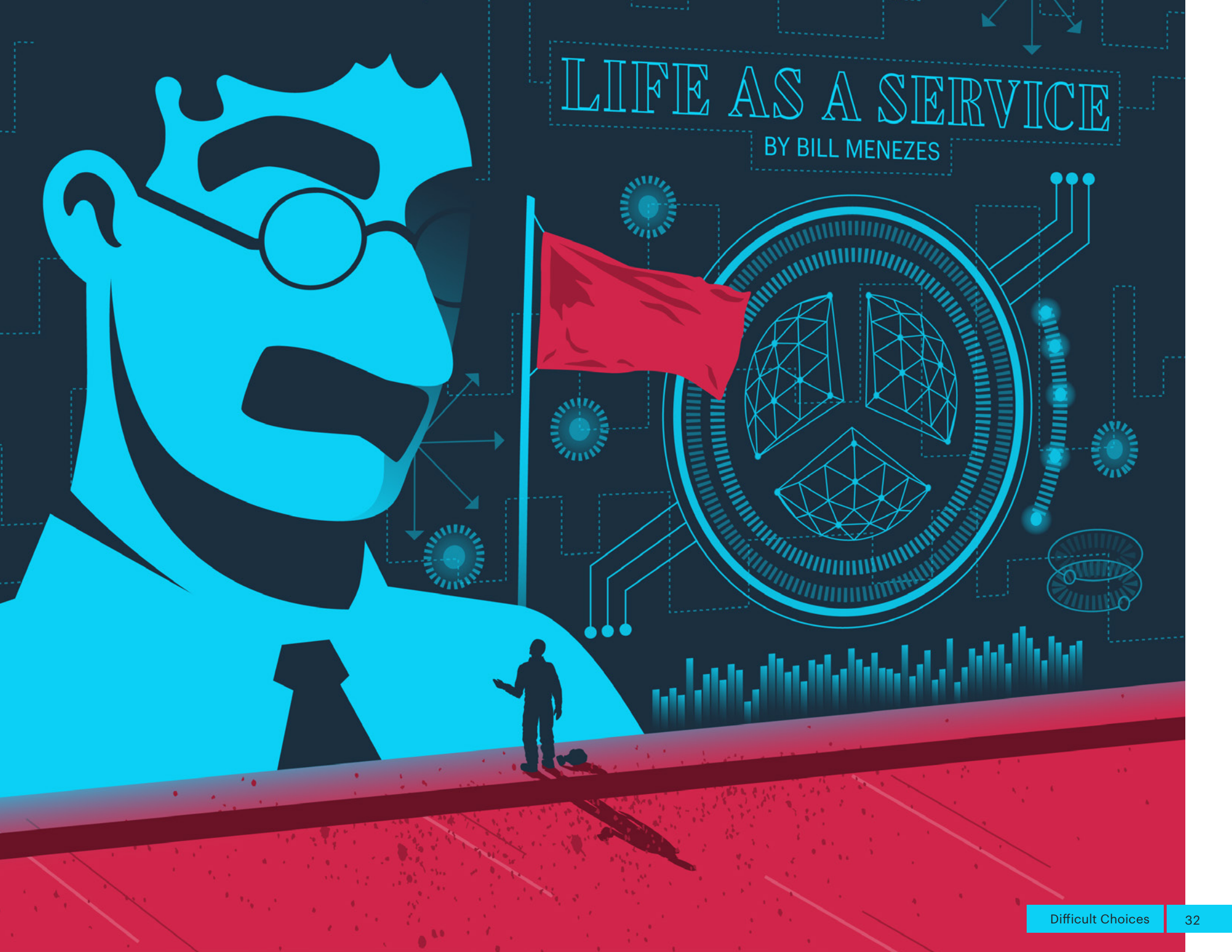
“Mr. Stuart, we need to talk.”

Lester Stuart opened his eyes to see a large man wearing a dark gray suit and a menacing smile. 🌟

**Craig Lowery** – Ph.D., Vice President Analyst  
Gartner for Product Teams

# LIFE AS A SERVICE

BY BILL MENEZES



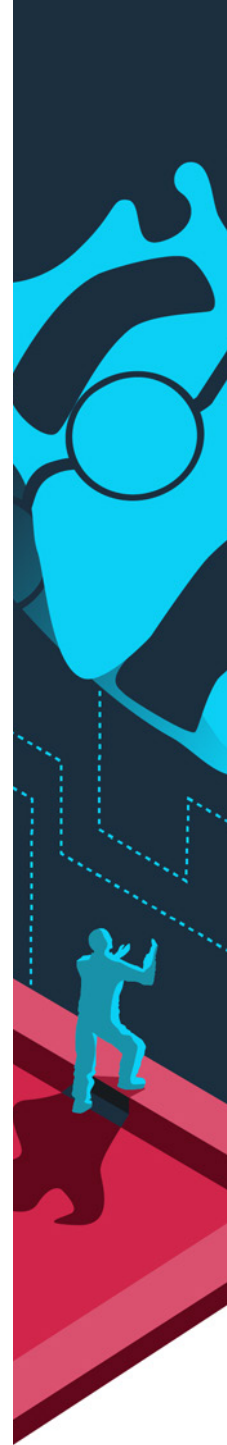
# “I CAN’T BELIEVE I’M ABOUT TO SAY THIS,”

I grumbled to a robo-help voice that, perhaps fittingly, sounded like the ancient actor Groucho Marx. “I want to speak to your manager. You can’t let my life just run out like this.”

You heard right, this is what I’m reduced to: Trying to haggle with some supervisor to keep from losing my basic subscription for life. My license for Life as a Service.

I’m still not sure what happened. Maybe I forgot to check the box for automatic renewal of the sub for the license that allows me to live here. Or, I should say, allows me to live, period. Maybe as a benefit from my crummy Hazmat Disposal Guild I should’ve gotten a heads-up. Maybe I should’ve policed my subs more diligently. I never had this issue with my air and water filter subs, food subs, clothing subs or roads sub. But this ... this is a problem.

A few generations ago we still did things like back in the ancient days on Earth. You needed or wanted something back then, for the most part you bought it, you owned it. Sure, we didn’t own \*everything\* we used. Most of us were renters for housing. And we’d ditched the ownership idea for things like music and other



digital entertainment, computing power, communications and even vehicles long before we had to ditch Earth for this place.

But the idea kept becoming more embedded in everything that we did, wanted or needed, driven by the bright boys of commerce with the mantra that ownership was a pain. Stuff that you owned wore out, couldn’t be updated with the latest code. But use only what you want, for however long you wanted, at a low monthly cost? That was the ticket. It only took one generation for us to adopt clothing, appliances, furniture, toys for the kids ... personal stuff, as a service. You wanted to impress the family over the holidays? Boom: Scale up to nicer clothes, better furniture and some plusher bedsheets for a couple of weeks. Throw in a month’s subscription to a more upscale pet while you’re at it. Cockadoodle as a Service. Scale back down come 2 January.

Once we went down that road, imagination was the only limit. I mean, you never really “owned” food or booze anyway, you only rented it. But paying for the \*rights\* to use that food or booze? The idea made the capital class go ga-ga, and Everything as a Service was born. Naturally, once the government started imposing resource restrictions back in grandpa’s day — when we started

tapping \*this\* planet out — it made sense to require subscription licensing for public infrastructure and services. Roads. Cops. Spent uranium mitigation. Thank god we made that nonaggression treaty with those idiots around Proxima Centauri, or Big Brother would've found a way to make us subscribe for military protection, too.

I subscribed; everyone did. It didn't seem like a bad way to go. You got group rates through your guild. If you lost your job or couldn't work, you got government credits to extend your subs for the essentials until you could sign a new contract elsewhere. A year or so of food, use of your clothing, dwelling, air and water filters, and Basic Life, was more than enough to cover any gaps. Until now.

My first red flag was just that: A stupid animated red flag on my Goolexi screen a couple of days ago, warning that my Basic Life subscription would cease for good at the end of the month. That's for the license I've had since I popped out of the surrogate incubator about twenty-seven years ago. It's what we got instead of the perpetual free licenses everyone used to get at "birth" in order to live here. Basic did the same thing, but for an annual sub fee. You got the first sixteen years courtesy of Big Brother, the rest was up to

you. Renew, leave or get composted.

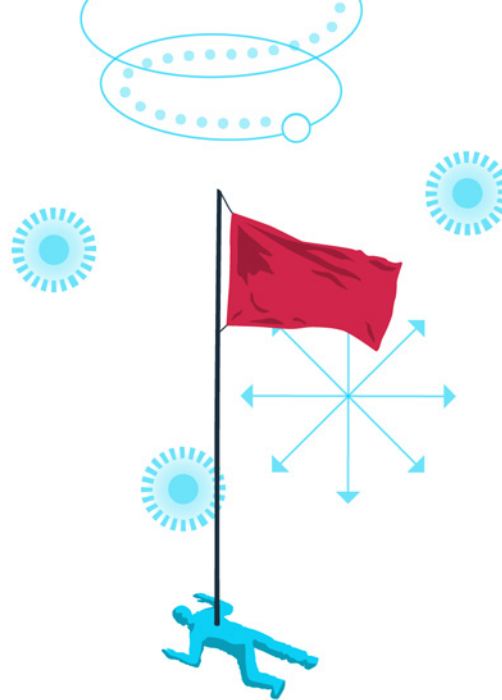
Not wanting to die or relocate to some hellhole colony, I took a deep breath and pinged the robo help. "What the hell?" I essentially asked.

"We've decided not to renew your subscription," Groucho replied.

"Excuse me?"

"We're retiring Basic Life. Hardly anyone buys that tier anymore. You need to renew at Silver level. Or Titanium. That'd be smart."

"Wait, how the hell can you just decide to cut me off? Make me have to transition to some upsold level I don't need and can't afford in order to stay here? If I have to relocate, that'll cut years off my life! And



that's if I don't die in transit because of some cheap hibernator. I can't be the only one who's complained."

"Oh, it's all in the terms and conditions. Termination for convenience, remember? We sent everyone an e-mail a couple of years ago. Only affects a couple million people. And most of them upgrade.

"Think of it this way," Groucho continued. "It's for your own benefit. It's the ultimate bundle."

I glared at him. Or, rather, I glared at the screen. Then I demanded to speak to the manager about a waiver to keep my Basic.

"Good luck with that, the system is hardwired to reject those types of changes. No discretion; cuts down on favoritism, you know? Anything else I can do for you today?"

And that's where we left it. I'm already maxed at one hundred percent of my income for subs. Either I drastically spin down some of my other subs — downgrade my food sub to coma slurry level — so I can afford Silver Life, or book passage on the next freighter to Lord knows where.

I hate this planet. 🌟

**Bill Menezes** – Director Analyst  
Sourcing, Procurement and Vendor Management



# AMONG STARS HERE

BY NINA SHOWELL

# I'VE ONLY BEEN ON PLANET B FOR A WEEK,

and I already miss the old New York City. This version just isn't the same. "Keep moving," the fat man directing traffic used to scream, not because he was mad, but because his job demanded efficiency. We all know that humans are an interconnected species; it's our relationships that unite us. And there's no better demonstration than New York City. As soon as you walk out of the secure area at JFK airport, the roar of the crowd hits you. Professional drivers hold up signs: "Anne Neuman," "Jose Wilson," "Raymond Cho." Isn't it weird to pick someone up from the airport when you have no idea who they are? But even the weakest connections used to exist in New York.

*Bzzt, Bzzt.* That's my awakening device, same as every morning. I slam my hand on top of it, still half asleep, and manage to send the thing spiraling off the edge of the nightstand. *Do I really need to get out of my slumber pod?* Planet B was supposed to be fun, experimental, exciting. It was our escape. Instead, I'm back in the drudgery, even though I made it here safe and sound. It's the same life I've had for

the past 48 years, and it's time to head to the productivity building. We're working on the latest intergalactic transport system (the new version should be eleven percent faster), but that means a joyless life of sitting at my simulation terminal for hours on end. *Sigh.*

Later in the day, I go to the medical commissioner's office for a routine checkup. "Do you have amnesia?" she asks.

"What's amnesia?," I quip back sarcastically, both surprised and embarrassed that my thoughts are already starting to fade.

"Space travel will do that to you," she responds. "And welcome to Planet B. This is a formidable place, but you'll get used to it after a year or two." *What's that supposed to mean?*, I wonder, silently, flummoxed. But I hold my tongue. Questioning life on Planet B is frowned upon by the High Council. The consequences are unknown, but I'm sure they're harsh.

If there were an easy answer to this mess, we would have figured it out by now. "Wicked Problems" aren't called that because they're evil, but because there's no good solution. Climate change, world hunger, political unrest, you name it. How can we move forward when there's no right answer, when we don't understand the full picture, and when no one can agree? When do we keep trying, and when do we give up?

Just before dinner, I go to a nearby nutrient market, where I see a short woman struggling to reach a bulb of carb mix that's high on a towering shelf. I pass by quickly, not wanting her to notice that I saw her having difficulty. *Who cares*, I think. *It's somebody else's problem, not mine.* I immediately feel guilty, and contemplate retracing my steps, but ultimately keep walking, even though I'm in no rush. My decision to stroll onward happens in a split second, but I notice my internal conflict. *Does that make me a good person or a terrible person?* I muse.

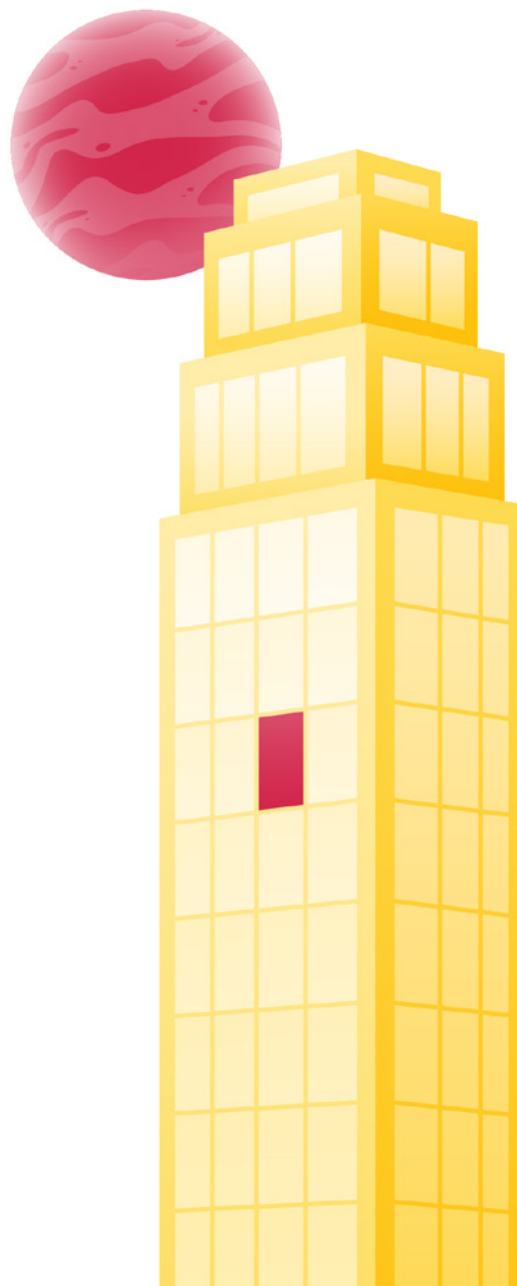
*Don't ask questions*, I remind myself. There's no room for debate here. The High Council will make sure that lady gets her stupid bulb of carbohydrate mix.

Before we came to Planet B, Lottie had sold me on the idea. "A fresh start," she claimed. "It'll be a new beginning. A chance to reinvent ourselves. No more climate change, world hunger, drudgery. It's the land of opportunity. I'm sure we'll have fun." As I recall this memory, I roll my eyes. The problems on Earth were frustrating. But they call this new place Planet B for a reason. We knew we needed to fix things, but it was too much work, so we left. Plan B.

I remember the last time I was in a grocery store on Earth, when Lottie handed me a bundle of unappetizing, thick, woody asparagus. "No, thinner," I said. She handed me a smaller bunch, still full of the same unappetizingly tough stalks. Then the hand of a stranger came out of nowhere, and passed me a bundle of tender, skinny spears. "Perfect," I said.

*A stranger helped me*, I realize. *And I regret not helping the woman reach the carb mix.*

As I arrive home from the nutrient market, I turn the latch on my door, and my keys jingle as I cram them into the front pocket of



my worn-out spacesuit. Apartment 6E, 1234 S Broadway, New New York. It's the exact same as Earth, I realize. But Planet B is worse, since the High Council controls everything. There's no societal debate, no discussion, no group understanding, no helping each other, and worst of all, no friendship. I panic, silently. *What am I going to do? How can I get out of this cycle before it's too late? Reframe this*, I tell myself. *You already know what to do.*

When I make it inside the door of my dwelling unit, arms full of overflowing bags of nutrient bulbs, I quickly drop everything on the table. I hastily pick up the phone and dial the number automatically, from memory; it hasn't faded from my mind yet.

*Lottie*, I say. *It's been too long. I'm coming home. I know it's hard, but we need to give Planet A another chance.*

And then ... the line goes dead. I hear a voice, but it's not Lottie. Who could it be? Echoing faintly as if it's far away, the voice on the other end says, "Your actions are forbidden. You have been summoned for a formal inquisition into your character, effective immediately."

*Gulp.* 🌟

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**Nina Showell** – Associate Principal Analyst  
Data & Analytics



# LIFE

by Nolan Hart & Lucas Kobat



**6:00 AM.**

DING!

John 832 sat up in bed.

The darkness of the room slowly faded as the lights joined the alarm in signaling the morning. All around him his dorm mates were also waking. John's earliest memories were waking up around these people. He had shared adjacent bunks with them his whole life. All he knew is what his fifteen bunk mates did for the Community.

Nushi worked in the air purification center.

Jose operated a food generator.

Mohammed was involved in transportation, and Maria worked in the life management clinic.

"Good morning," John said and smiled as Nushi walked by.

"Have a good one," she quipped as she left the dorm.

John repeated this call and response fourteen more times while he donned dark blue coveralls and sturdy boots. The clothing was not unique — quite the opposite — but each citizen wore a uniform fitting for their role. John worked in resource extraction, a delicate but labor-intensive job.

John and his fellow extractors were tasked with NOT repeating the mistakes that led to Earth's collapse. They had to sustain the community by providing the necessary raw materials for building, power, and transportation, while managing their new world's environment.

"One mistake could end with all of us on a trip to Planet C!" John remembered the training video yelling at him. "No distractions on the job site!"

Fully dressed, John retrieved the ID badge lying on the nightstand before heading out to the dining hall. On the badge was a picture of John, with *John 832* printed below it.

Unbeknownst to John, only enough working age individuals to sustain the Community were allowed to escape a dying Earth. Each had a vital skill set. Rather than wasting resources training children, caring for individuals past their useful life, or dealing with the drama of human intimacy, the life management clinic maintained efficiency in the Community by repeatedly spawning new versions of the original population and dispersing of those who were no longer fit for service.

After a quick morning meal, John was on the subway on his way to the extraction site. He looked at the faces around him. All familiar. All of them joined him for a portion of his daily commute to and from the site; they had for years. Yet without their badges, he would not have known their names.

*This never used to bother me, he thought. It was all I knew — I thought this was just life. Wake up. Eat. Work. Eat. Sleep. Repeat. Commit to your role to help All survive. But those pictures ...*

John was at the site now. The same extraction site he had found the book in the wreckage of a craft that had left Earth but must have had trouble landing.

The image of the big, red box with the white letters “LIFE” plastered on the cover flashed in John’s mind. *Why didn’t I turn it in? Why did I hide it and why can I not stop looking at it?*

John snuck away, again, to stare at the pages of people who looked like him, but were so drastically different. He glimpsed an image of a life through the tattered, dirty pages that was completely foreign and unfamiliar to anything he knew.

He paused on the page of the man and woman embracing on the street, lips locked, onlookers smiling, flags waving. *What is this? Why would they touch like that? Why do I feel like I am missing something? Physical contact just spreads disease ... so why do I want to do it?*

John thumbed through more confusing pages — violence, something called baseball, a black-and-white image of a man singing for a crowd, laughter, despair, hunger, joy, a wedding (which John understood as an event where people got dressed in special clothes and waved at people).

*Life was different. People connected. Talked. Touched. Shared. And they WANTED this.* John was not clear on what these images meant or the indescribable emotions he now felt. John was not connected to anyone. *I wish I’d never seen this. I wish I could stop thinking about it.*

6:00 PM.

DING!

John and the other extractors shuffled toward the trains. The day was done. *Here we go. Same old routine: clean up, eat, sleep,* John thought as he rode the train. A woman seated on the opposite bench caught John’s eye.

*What would it be like to embrace her just like the picture? Would I catch a disease? Would she? Would it make me feel less alone?*

John reached across the train, wrapped his arms around her, dipped her back, and pressed his face to hers. She was warm, her skin soft, she smelled like a mixture of dry Earth and chemicals (she must have worked in the food production division), and she was MAD.

The woman quickly shoved John away, and stepped back. John saw a look of pure horror on her face. Everyone on the train was frozen. Everyone stared but no one moved.

“What are you doing,” the woman, her badge read *Yan 798*, yelled. She took a sanitation cloth from her work pack and vigorously rubbed her hand and her mouth.

“I’m sorry ... I don’t know,” stuttered John. His head dropped to the floor but inside his heart was pounding, his mind racing. *So THAT is what it felt like to hold*

*someone, to feel them, to be close. I wish she hadn’t shoved me away, but I get it. I can’t imagine how she feels; people don’t touch like that. WHAT WAS I THINKING!*

The whole experience was exciting, but also terrifying. What would happen now? Why had he even done it?

John exited the train at the next stop just to get away, walking to the dorm. The extra walking made him late for his meal, but he joined his dorm mates at the normal time for bed. The lights dimmed to complete darkness at 9:00 PM sharp. All were soon asleep.

6:00 AM.

DING!

John 833 sat up in bed.

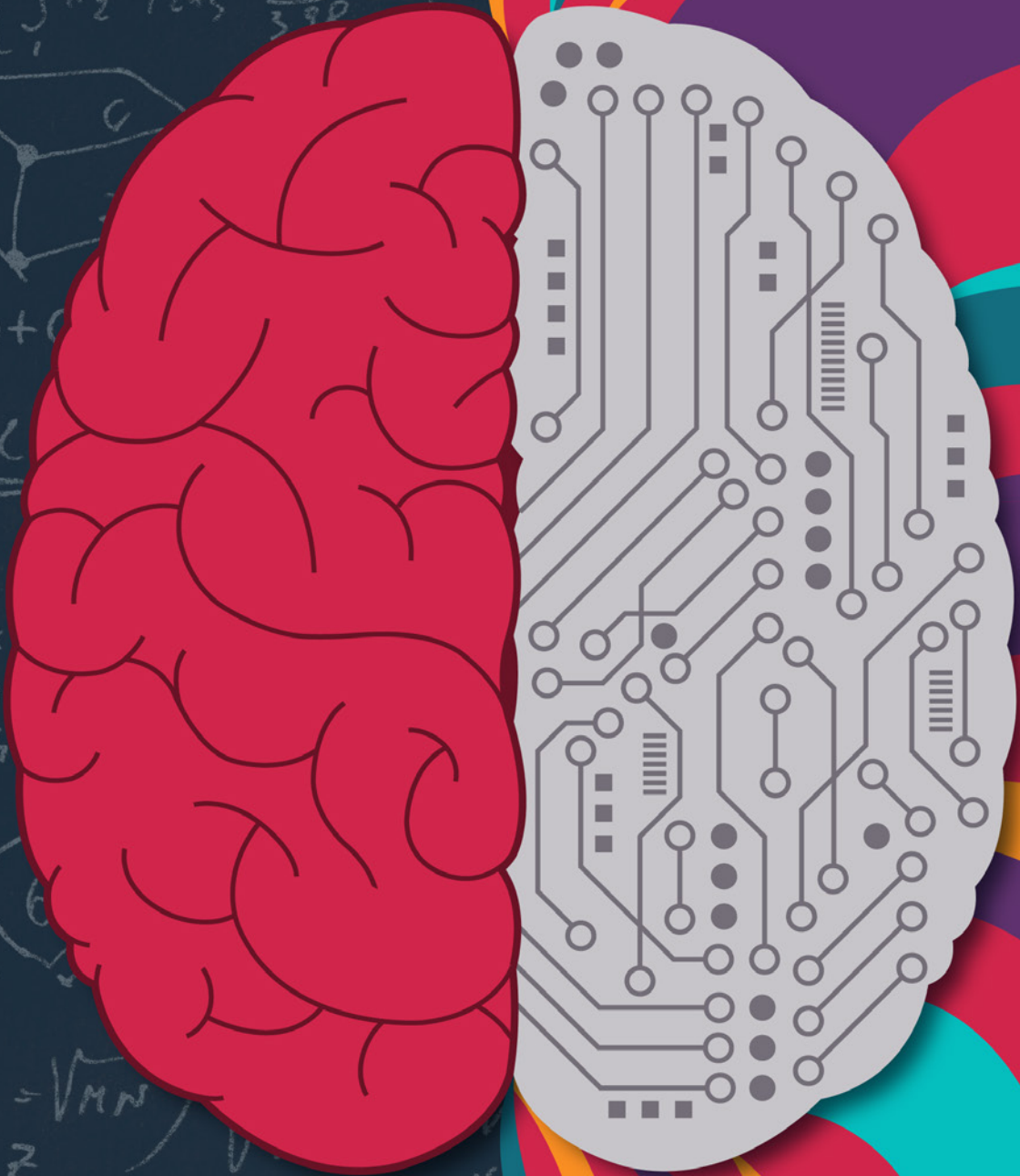


**Nolan Hart** – Associate Principal Analyst  
EA-Business Architecture

**Lucas Kobat** – Principal, Advisory  
Enterprise Architecture & Technology Innovation

$x = \cos(x) + \sin(y)$   
 $2.943 - y$   
 $n = 4.3219$   
 $x = 4.94$   
 $y = 2.81$   
 $n = 5.43$   
 $43c - 78.94n$   
 $\int_0^1 x^2 - y^2 dx = \frac{\pi}{3.90}$   
 $\ln(x) - 2a$   
 $A = \sqrt{3x + 4y}$   
 $\sin(\alpha) = N_2$   
 $\tan(\beta) = F$   
 $\{N_1, M_1, \dots, N_n, M_n\}$   
 $\cos(x) + \sin(y)$   
 $2x^2 + 4.51y + 7.62z = N$   
 $P(n) = \sqrt{n^2 + 1} - x^9$   
 $\ln(n) = \log m$

**C** **A** **H** **O** **S**



by Svetlana Sicular

&

Pieter Den Hamer

# Despite being human,

Destiny felt more of a robot than her thinking machine. On day 1,427 of the voyage to Planet B, her only companion, the thinking machine, sounded really annoying. Not because it knew everything — this was handy — but because it sang songs with a maddeningly sweet voice, supposedly to cheer the human up.

Destiny loved theories and challenges, not music. Her entertainment on the trip was to learn something new and time-consuming. Since day 1,409 she had been engrossed in chaos theory. The thinking machine informed her that, according to chaos theory, there are interconnections and underlying patterns within the apparent randomness of chaotic complex systems. Indeed, thought Destiny, the human brain is desperate for patterns. Hallucinations, for example, occur when brains look for patterns in the absence of external stimuli, like under sensory deprivations. Machines do the same thing. Show them a plain black wall and they will short-circuit, trying to discern at least some order.

On day 1,429, inspired by chaos theory, Destiny added a bit of randomness to make her thinking machine more bearable. The added randomness backfired. The robot started spewing random quotes.

“The main characteristic of people is that they’re very noisy. You show them the same stimulus twice, they don’t give you the same response twice,” the thinking machine uttered in the sweetest voice with a trace of arrogance, quoting ancient behavioral economist D. Kahneman. The statement only confirmed to Destiny that she was not a typical human: When something was principally important to her, she would give the same response. But most things were NOT important. “I don’t care about songs — that’s where the noise takes over.” Mistakes happen when things are not important.

Noise contains random gems. Randomness is essential for discovery and problem solving. How many people took a bath before Archimedes exclaimed “Eureka”? Machines can deliver many results — but can they recognize which results are groundbreaking? People are the ones who attribute meaning to random outputs.

The thinking machine used to punctually make Destiny do push-ups and take vitamins to ensure she arrived at Planet B unscathed. Destiny did care about her health, but give her a break! On day 1,433, the machine shut up about vitamins — was randomness working? Destiny’s near-robotic mind whispered that 1,433 was a prime number, the concept used by Gödel to prove his incompleteness theorems.

Destiny recalled that Gödel had shown that a mathematically (i.e. artificially) defined system cannot be consistent and at the same time complete. In other words, a complete system must contain statements that contradict each other. Gödel’s incompleteness theorems serve as an argument that AGI (artificial general intelligence) cannot be reached. AI systems cannot transcend beyond their definitions and be creative enough to deal with new circumstances. A new AI approach is needed; one that goes beyond logic.

On day 1,439, inspired by the small success of the added

randomness, Destiny was anxious to see what would happen if she built some of Gödel's inconsistency into the thinking machine. She hoped it would make it more complete, more like AGI. Destiny imagined this sugary-voiced device to be the first of an entire new generation of AI, embracing complex systems and non-linear dynamics. She waited for the results. They could be too subtle to notice. For the first time on the voyage, Destiny didn't feel like a robot; rather, like a hunter waiting for prey, proud that her human brain could connect the dots in chaos.

On day 1,447, the thinking machine announced the approach to Planet B, landing in fifty-two days. Destiny hugged the device's cold body. There was no wood to knock on. Well, she'd keep her fingers crossed for the slowest fifty-two days ever.

*"To go slow is to go fast,"* asserted the machine.

Finally, day 1,499 — the day! — came. The thinking machine said that landing would be dangerous due to a sandstorm. Destiny didn't need this warning to know that something was wrong.

*"Get comfortable being uncomfortable,"* was the only advice from the thinking machine. Nothing more followed in its habitually



sweet voice. The sandstorm was already challenging all systems. The power drained, redirected somewhere. Where? Why? Destiny was sweating, uncomfortable in her landing gear. The inspection of the systems showed all the power was being consumed by ... the thinking machine. Destiny realized the robotic mind was hallucinating, trying to find patterns in the black void of the sandstorm.

Strange loops reminded Destiny of the first ever Moon landing, when a human had to take control of the spacecraft. She did the same: redirected the power, in every sense of the term. All her experience, intuition and will were focused on sensing the chaos.

The spacedrome on Planet B was asking the ship to go horizontal. The rest of the planet was in chaos, it warned. Humans know when to ignore instructions: Destiny went up vertically. *"Vertical is the new horizontal,"* the groggy thinking machine said. From above, Destiny could see another part of the planet,

not charted on the maps. It looked like it could have intelligent life. The spaceship's power was plummeting, and Destiny knew she had to land. "I'll land where the life is — what could go wrong?"

*"Worse is better,"* affirmed the machine. Humans are capable of attributing meaning, and Destiny read the machine's random output as a good sign. Inconsistency made her world feel more complete. She used all of her five senses, and one more. The spaceship touched down. In the chaos of the sandstorm, she saw several people approaching. They looked normal, even welcoming. None of them were wearing any devices. Why?

The thinking machine suddenly sang, in its bitter-sweet voice, as if responding to Destiny's thoughts.

*Let it be, let it be, let it be, let it be*

*Yeah, there will be an answer*

*Let it be*

"Planet B, Planet B ..." Destiny continued the tune with unfettered enthusiasm. 🌈

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**Svetlana Sicular** – Vice President Analyst  
Artificial Intelligence

**Pieter Den Hamer** – Senior Director Analyst  
Data & Analytics



Penny  
Penny  
by Whit Andrews

# I never see you up here on the elevator.

The view is hella good from orbit though. Sit with me where we can see down to Surface.

Look! I can see your city from here.

I bet that if I dropped a flatcoin in that scope right there, the lens would show me your roof. You don't live in one of the houses, do you? You live in one of the lifeblocks. Anyone you care about in that lifeblock? I'm betting there is someone. Someone pretty, someone handsome, someone young who still plays with toys that don't use electricity. Maybe a lot of someones. I bet you thought about them on the way up.

Maybe you should think about them now.

Sit with me, like I said.

Listen, Penny Penny. I know you don't like me. I know you don't like my people. I know you don't like what we can do with the chaincash we get from decrypting, maybe, a transaction block or two. You're a



goody-goody and you think it's your duty to right all the wrongs.

But you listen up.

Your Denial of Spending attack was pretty slick. We never saw it coming. Sending point-oh-oh-oh-oh-one B-cents to every buyer on the chain — was that a trillion buyers? Definitely crashed our operations.

Oh, let's not be self-righteous. Ironically, we think "laundering" is a mighty dirty word. An old word. We prefer "mixsharding." The more you shard the data, the less anyone can tell what it adds up to. The more you mix the shards, the less anyone can put it all back together. Now that quantum's airlocked away all the cryptography, all that's left is air gap.

Back to the Denial. Sure, you crashed the system. We can't mixshard because we can't find our shards in the mix any more. And you just keep pumping those minipennies everywhere you can, so business for us is dead. You know I had to buy us this coffee with flatcoin? Had to chase it out of the phone case with my sonic flosser.

But PP. Did you see what else crashed? Everything.

When part of the chain crashes, it all crashes. When our forefathers decided Planet B would run on the chain, oh blessed were they, they

decided that the price of perfect transparency would be perfect interdependence. You crash the blocks, you crash everyone.

You can flare your nostrils at me all you want. I didn't crash the donation plate at the Church of Our Lady of the Stars. I didn't break Piggybank.Gov. I didn't leave the Girl Scout Cookie Shuttle spinning in low orbit while it waited for someone to pay for its next chunk of fuel. All that? That was you.

Here's the proof, Penny-squared. I ran the analysis in the quantum box on Farmoon. It's cheaper out there. Takes a little while for

the light to get there and back, but the extra minutes are worth it. Can't use the loop to beat the cryptocrackers, but I sure can, and I sure did, to do an analysis that brings together all the shards, so that people can see who did what and what that means. And they're going to see it was you.

Trust me when I tell you that this little data snapshot has "Penny Penny" written all over it. Won't you be popular when Planet B finds out that it was self-righteous you who brought down the whole money system and left everyone arguing about how much flatcoin they should spend on food and rent?

No, you won't. Because only the rich can afford to air gap their money.

We aren't rich, Penny. It costs a lot to send transactions to Farmoon to crack them in the Q box.

We only make .0005 pennies when someone looks at a naughty snap on the train for less than a second.

Just .005 pennies whenever someone gets an illegal atomizer shot of sriracha on their last bite of Proteen.

Just .05 pennies to touch the town pet.

And .5 pennies to give it a piece of kibble. (It's an absolute unit. But a big boy is a happy boy.)

By tomorrow, unless you stop your attack, you will have stopped it all.

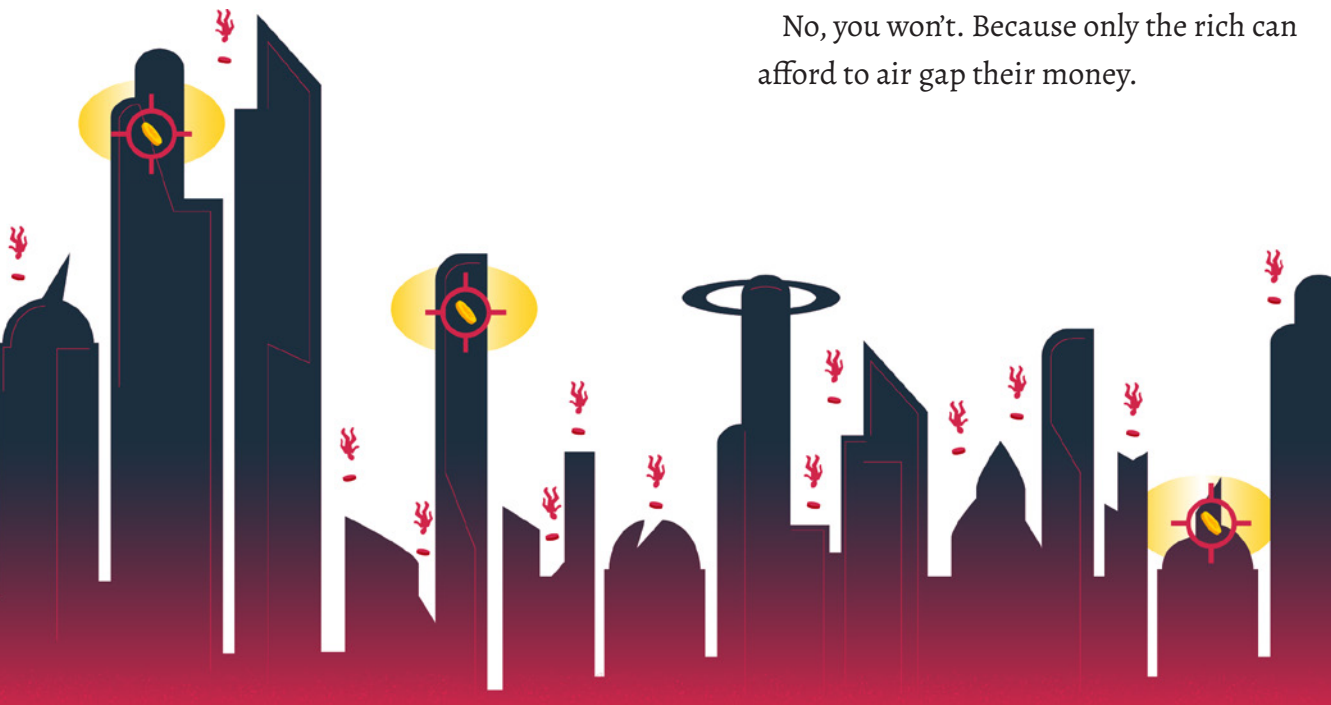
Four trillion gulps of air.

Three trillion sips of water.

Two trillion grains of rice.

A trillion laughs and smiles and moments that make life just that much easier.

Will you stop the spending attack and let the mixing begin again, Penny Penny? Or should I share this data that proves it was you? Right here. Where your lifeblock can see it up in the stars? 🌑



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**Whit Andrews** -

Distinguished Vice President Analyst  
Application Innovation

An illustration of a woman with dark hair in a bun, wearing a white sleeveless dress and a teal choker. She is looking out over a futuristic cityscape at night. The city features tall buildings with yellow lights and several flying cars. The background is dark with stars. The title 'THE ECONOMIC CHOICE' is written in large, bold, yellow letters across the right side of the image.

# THE ECONOMIC CHOICE

by Keith Andes



*But the better choice is often the person who doesn't want it. We need prosperity. He won't bring that.*

Adreena nods goodbye to Derrick as she walks pensively down the skyway overlooking the manufacturing plant. The hum of autonomous machines fills the vast room she's crossing to get back to the ship. That hum always brings clarity to her thoughts.

*What's at stake? The colonies. All two million of us left, carrying the torch of human life. We can survive. But who wants to survive without purpose? Individuality? Choice? Opportunity?*

She approaches the edge of the government colony, U.S. Mars Territory (USMT), and passes through the bulky loading door of the government ship she's been lent to travel back to her home colony.

"What'd he say, Adreena?"

She's abruptly pulled from her thoughts by her colleague, Callie, who is sitting on the bridge facing the stars.

Adreena starts with a sigh. "He wants to give us this ship, basically. He's offering unlimited access to go between the colonies and mining bases without scrutiny. To do it, he's nominated me for a new government role, which will go to a direct vote with the USMT colonists ..." She pauses.

"... but taking government resources ... it doesn't sit right."

"Besides," Adreena continues, looking honestly over at Callie, "Why do I get the role? Why not you? You're the one doing the upgrades."

Callie rolls her eyes and doesn't respond. Which says enough; she wants nothing to do with it. She just wants to design, build and innovate. And she knows the replicator design software. Which is good because — Callie being the exception — that knowledge was lost with Earth.

Adreena came to Mars as the liaison for New World Systems. Callie came as the lead engineer. They design and upgrade automated supply chains. But neither really "work for" their company anymore, due to a problem all colonists now share: the value of the dollar was lost with Earth. People no longer work for pay. They work for the survival of humankind.

As the ship rises toward the upper Martian atmosphere, they both gaze down at USMT.

*What a colony,* Adreena thinks.

The U.S. government broke ground on the USMT colony well after the original colony, PC Colony, was already established on Mars. USMT's magnificence demonstrates that U.S. leaders were in favor of the growing presence in space, but they regretted their sponsorship that led to the privately owned PC Colony.

U.S. citizens, under the rule of a company.

But the impact and success of PC Colony overrode the government's

desire to pull their sponsorship. Instead, as PC Colony thrived, the USMT colony was born to become the new giant.

PC Colony is beautiful, too. But it wasn't built in the consistent, structured way that USMT was. Instead, PC Colony's beauty is in the diversity of its design and structure.

You can see the timeline of PC Colony as you walk through the different zones and pods. The design improved with each evolution of the build-out: its owner and operator, People Company, injected ideas from the nations, cultures and companies that the colony's infrastructure was designed to serve. Today it's a bustling colony of almost a million Martians, with roots from varying cultures around Earth. Maybe USMT is prettier ... but PC Colony is definitely more lovely.

Adreena shifts her eyes to the growing curvature of the horizon. They will get back home to PC Colony soon.

*Here we are, hanging in space. Our supply chains and farms and mines keep us going, but ... money is gone. Authority is questionable. Who even owns what?*

The promise of a post-scarcity future — and a small Universal Basic Income (UBI) to supplement their traditional incomes — is what convinced many to come to

Mars. It's also what ended up giving society just enough to survive without income after Earth was gone. Humanity had not reached post-scarcity yet, but was on the way to it, and space colonization spurred the movement to get there. UBI credits were offered by colony operators, whether government or business. The credits could only be exchanged for essential goods; the dollar was for everything else, and still had to be earned.

But in the midst of this mass colonization, the Earth was lost. And the dollar. And so now the line between “company” and “government” has all but vanished. A consolidation of “who is a citizen of what” began, as the keyholders of the remaining entities started to assimilate assets for power.

*What a mess.* Adreena peers down across the stunning red globe as the ship nears orbit above it. *But Mars is still beautiful.*

Callie, however, is fixated on the activity above: autonomous transporters streak by, carrying raw materials back from a nearby asteroid mine, just like ants bringing food back to an ant colony. Callie smirks. “I can see why Derrick is pushing so hard for upgrades. My transporters replicate twice as fast as their old version. He can't stand *ours* being better.”

“I agree, but I think there's more to it. If he makes USMT's essential goods better, USMT colony citizenship could become more desirable than the other colonies. Then he can amalgamate the smaller sub-colonies over the horizon and exceed the population of PC Colony. He'd gain leverage over PC Colony, and take that, too.” Her voice trails off as her concern grows.

“Combining efforts and resources will help humanity survive, but ... I'm worried about his intentions.” She pauses.

Callie rolls her eyes again and changes the subject. “Uh-huh. Can we ... go out to Mining Base Echo? So I can show you the idea I have to reduce the effects of cutting friction?” She asks eagerly.

Adreena smiles, and keys in the override for coordinates to the refilling station, then the mining base. She looks over at Callie. Now headed to the mine, Callie is beaming with energy.

*We'll have to make a choice, Callie, as a team, she thinks to herself. No one else has realized your knowledge is the most valuable asset in the universe.* 🌟

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**Keith Andes** – Team Manager  
Analyst Lab



# FINDING A HOME

by Xue Bai

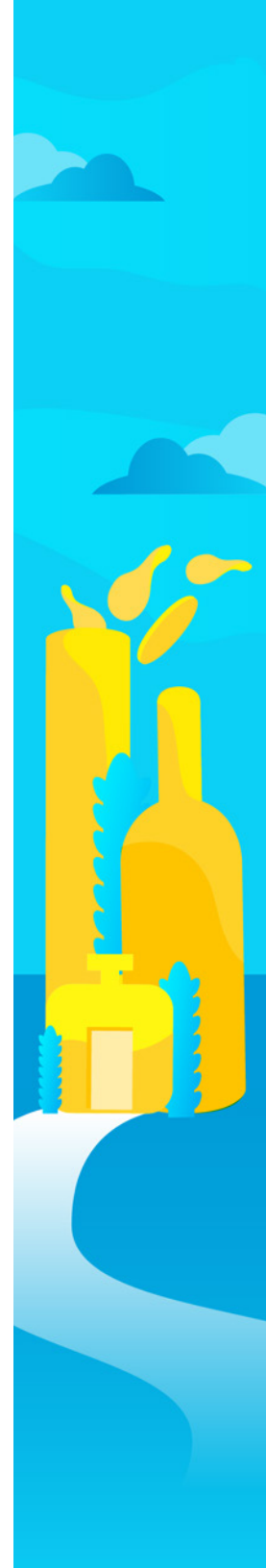
# Tomorrow was to be Alia's day of choice.

Representatives from the top ten brands that best suit her based on extensive testing would interview her, and she, at the same time, would interview them.

“You are nervous,” said Maya, watching Alia sort through outfits in preparation for the big day. She wanted to dress in clothes and accessories from those brands she agreed with the most in terms of national policies. Maya, her best friend, was there to help.

“Yes and no. Yes, because after tomorrow I will know where I am going to live for the next couple decades at the very least, if not for the rest of my life. But also no, because I've been preparing to make this choice since ... well, I've lost count of how many years it's been. You know that.” Alia answered with a confident smile.

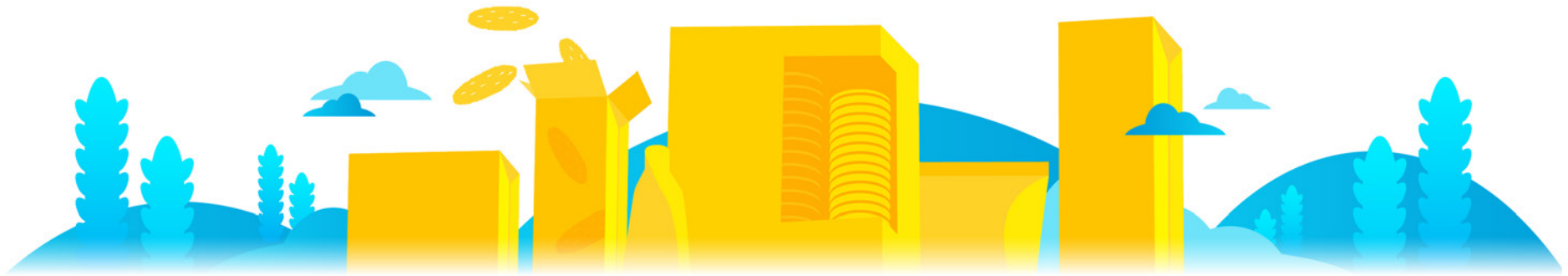
Indeed, Alia had spent most of her adolescent years trying to make an informed decision about the corporate-nation she'd one day choose. She had taken advanced-placement corporate-nation history classes, carefully examining the histories of each corporate-nation that she was interested in. She had studied how the brands in those corporate-nations had formed their initial federation, and how old brands had left and new brands joined.



She particularly liked to study those corporate-nations' policies, like where they sourced materials, what the manufacturing process was, how they treated citizen-employees, whether they took in brand refugees (people whose favorite products have been discontinued) and how they treated them. Their national policies were also an important aspect of differentiation — whether they provided universal healthcare or childcare, whether they conducted central planning or allowed small private businesses, whether they allowed imports, what textbooks they used for K-12 education. Most importantly, she had bought products from encrypted online markets that had been smuggled in from other corporate-nations, to test herself.

“I still cannot believe you cheated in the experiential test. I know you are determined, but you are risking being barred from immigration permanently,” Maya said. She still remembered her astonishment two years prior, when Alia had first told her that she was paying a huge amount of money to an underground training group to teach her how to fake biometric results for the test.

“I had to. I don't want to stick to products I don't like at all for the rest of my life, even if they



are from a corporation that perfectly solves the issues I care about. I also don't want to live in a poorly developed corporate-nation, no matter how much I like their products or policies. It's not an easy trade-off," Alia shrugged.

In the previous two years, Alia, like anyone who chooses to immigrate, had been sent hundreds of products that she had never used or even heard of before, to test in all aspects of her life. Her biometric reactions to each product were tested after a seven-day trial period. Those biometric results would play a big part in determining which corporate-nation would be her best fit. It had been a tough and intense process.

"Thank goodness it's over with! It's worth the money. I made it," Alia continued. "You sure you don't want to give it a try? You don't regret not ever living in another corporate-nation?"

"No, at least not right now. You know I hate change. Plus, I like using things I produce myself, or things made by people I know. It

feels safer," Maya said, reiterating her stance. Alia and Maya lived in a small corporate-nation that their parents had moved to twenty-five years ago.

That had been during the time known as "the Great Schism," when nearly two thousand brands, many of which their parents had loved since childhood, had left a larger corporate-nation to form their own federation. The people who had settled there were all believers in self-reliance. Unlike many other smaller corporate-nations, this one didn't allow outsourcing (of either material or labor) or imports. They grew and produced everything that they used, which made life in this corporate-nation quite difficult and not to Alia's tastes. As she had grown older, she had dreamed about living somewhere with a wide variety of imported goods and a system with better policies to support families.

"Well," said Alia, "call me when you change your mind. Aha! This is the dress! It's very

flattering and I really like the designer's merchandising and DEI policies."

Alia would always remember what she had learned in history class: Everyone who lived in a corporate-nation was a citizen. Alia, too. The concept of citizenship itself was even older than Planet B. It had been a thing since the early days of Planet Earth, which had been the human race's first habitat. Alia could never quite understand how things could possibly have worked on Planet Earth. For example, how could people be bound by some abstract thing like nationality? Wouldn't there be civil wars all the time due to differences in values and beliefs?

The next day was to be her day of choice. A day on which she would make her final decision. Which corporate-nation would she call home? 🌟

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**Xue Bai** – Senior Principal  
Quant Innovation



# UNLOCKED

by Darren Topham

# Unlocked!

## The word floated before her above the med-station.

Pale. Blue. Sophisticated. She liked that. The nurse removed the cuff and stepped back, smiling.

“You’re all set,” she said, handing Lois a small steel-blue paper cup with a similarly colored capsule inside. “Don’t chew, just swallow.” Lois reached for a bulb of water and downed the pill. “You’ll need to stay isolated for at least six months to allow the gene alterations to take hold. But you know that already. And your deepsleep trip will enforce that anyway, right?”

Lois felt that warm flutter of excitement she always got when others mentioned her impending trip. Planet Bellerophon. So exciting! She could hardly wait. It had taken her so much effort to get selected. Not just the cost and the favor pulling, but the time. She’d had to hire a whole team across the Arcstation just to take care of it. It had cost her everything. Now she was here, at the actual embarkation ring, undergoing the final process. The Unlocking.

Humans had long ago lost the ability to produce their own vitamin C. Everyone knew you got vitamin D from sunlight, but for some reason, the ability to create C had been lost in an evolutionary misstep. So before she went, she needed this last Unlocking. She

didn’t really understand why more people didn’t do it. Sure it was expensive, but most insurers would cover it. If you litigated hard enough. And it was painless.

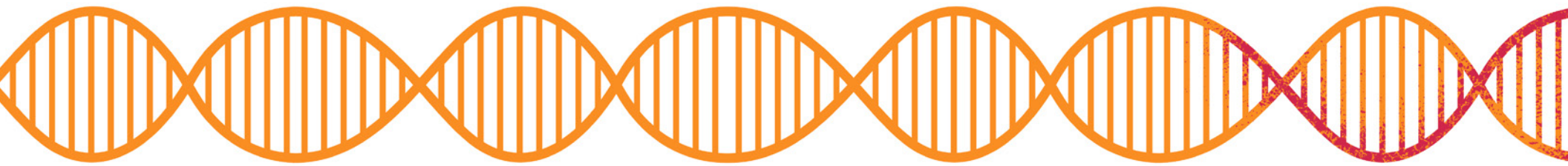
Besides, vitamin C prevents scurvy. She’d never actually seen a live case but she’d searched on it. It made your hair fall out! Disgusting! Her hair was perfect. It had taken ages to get it right; it was her best feature. Thick, tumbling, golden, to match her eyes. Scurvy sounded like the worst. Dirty. Common. Poor. It had been an easy decision to get her CVIT fixed.

“Now, I’ve uploaded an infopack to your xPad on the CVIT-CRISPR virus we’ve just administered. Specifications, quality certs, risks, that sort of thing.” said the nurse returning to her workstation. Lois was no stranger to gene modification. She’d been having it done since she was a child. Her parents had applied the usual sequencing packs early. As she’d grown up, she’d made further changes of her own.

But she’d been gene-locked for a few years now to prevent further changes. You couldn’t be too careful these days. Those silly Equality Warriors, or “Equos” as they preferred to be called, had spoiled it for everyone. Creating hokey home-lab gene viruses had become a game for those people. They’d laced the Arcstation food fabs, the water, all the premium cosmetics she used to use. It was like a personal vendetta!

But Lois had had enough. If they were unhappy with her fortunate “inequality” she’d show them. She was leaving Arcstation for Bellerophon. A beautiful new world full of beautiful new people where everything would be bright and happy and safe and peaceful again.

“OK,” the nurse interrupted, breaking Lois’ train of thought, “you’re checked out. If you’d like to proceed through to the embarkation area, our associates will get you prepped for deepsleep.” This was it. Time to go. Paradise awaited.



\*\*\*Eight Months Later\*\*\*

POD Door: UNLOCKED!

Lois woke slowly, the words floated before her. A face appeared in the perspex of the POD door staring intently at her. It was an odd face, round, flushed with thick lips and crowned with a shock of copper-red hair. Hardly a beautiful face. Never mind, he was probably just an overworked tech tasked with getting her out. He smiled and gave her a thumbs-up. She nodded and the face vanished to be replaced with a gloved hand and the sound of bleeping. There was a hiss and Lois' POD opened. Cool air smelling of pine and chemicals ruffled her hair.

"Welcome to Bellerophon," the tech beamed, "I'm Mike. I'll be your Homology Helper here while you get acclimated." He helped her out of the POD. "*He's shorter than I am!*" thought Lois, looking Mike up and down. He wore a somewhat rumpled jumpsuit, unadorned but for a simple pin of two parallel gold bars on the breast pocket. Rank bars she assumed. Mike held out his

arm and indicated a set of double doors off to one side. "Come on," he smiled amiably, "let's get you registered." Lois followed.

The doors opened into a large, bustling glass-walled atrium. Sunlight flickered through the high glass, dappled by tall trees against a clear azure sky. But Lois was oblivious. She stood, frozen, looking out at the hundreds of people milling about the reception. Different heights, different shapes, all in the same steel-blue jumpsuit. All with the same two-bar pin. All with the same copper-red hair. Unconsciously, Lois reached up and touched a handful of her own long, golden, locks.

"What's ... I ... I don't understand ..." she stammered "... their hair ... It's ..." Mike gazed across the floor and chuckled softly.

"Yeah," he said "I guess that's the kind of news we don't share back with Arcstation. Folks here asked the Equo Council to select a way for us to show our equality. Beside the pins of course. Held a poll and chose this. Delivered through airborne CRISPR. Straight to the genes. Great isn't it? A real badge

of honor. Our promise to each other. It's irreversible." His grin widened "You're gonna look great if you don't mind me saying." Lois stood. Stunned. Speechless.

"*They're Equos,*" she thought "*all of them! They're all equals.*" She turned to Mike, her face not concealing the horror and fear building inside her. "I want to go back. Now!" she screamed. Whatever it cost. Whatever it took. She could not be here. Mike's smile wavered for the first time.

"Uh, problem. The ship you came in on is single use ..."

"NOW!" Lois screamed.

Lois lay in her POD. Peaceful. Serene. The only occupied POD aboard the silent, rusting vessel. Her sleeping face held a faint smile, born from the anticipation of home. Of familiarity. Of privilege. Her golden hair framed her perfect face. Her beautiful, perfect golden hair. Already showing the first traces of a deep, shining coppery starlight. 🌟

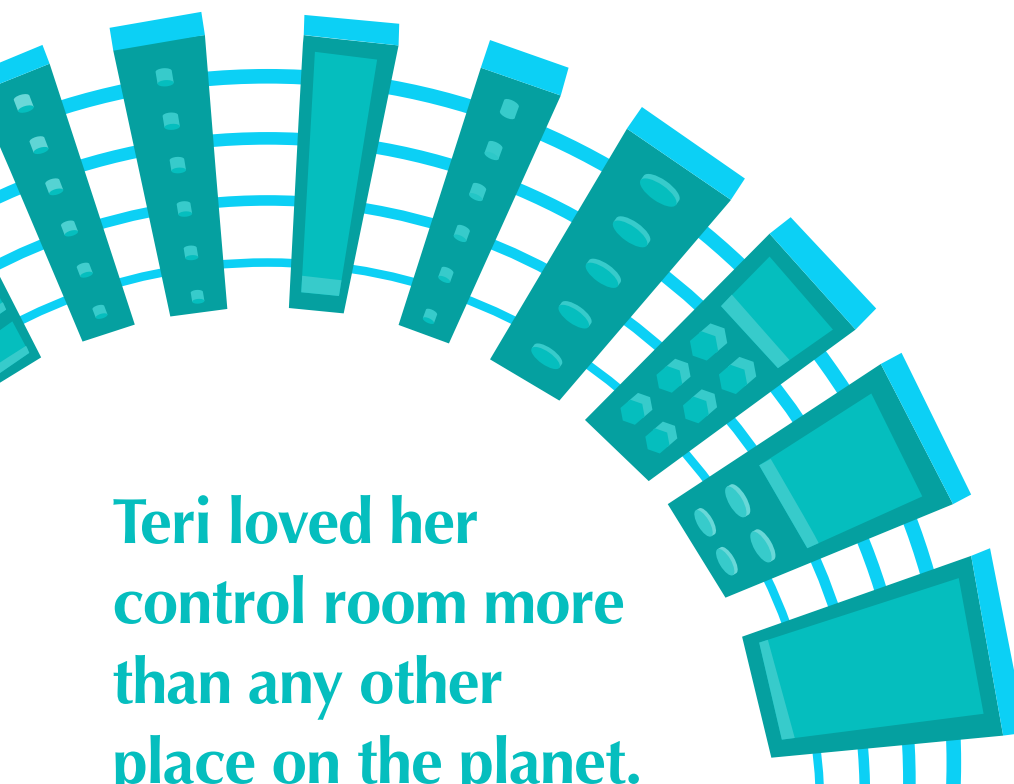
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**Darren Topham** – Senior Director Analyst  
CIO

# CAREER DAY

by  
Jackie Fenn





## Teri loved her control room more than any other place on the planet.

She'd fabbed it all herself, every dial and monitor and lever and switch. Others used standard holodisplays or retinals, but she enjoyed the visceral feel of matter against her fingertips. On a good day she felt exhilarated as she tweaked the goals for the colony and told herself there was nowhere else she'd rather be. On other days she felt a tugging, a brief flash of alternate paths and unlived lives that dashed her concentration.

Today was one of those other days. She was behind on her goal updates and now a school tour was on the way. There were dozens of gods in the building, but she always seemed to get the school tours because nobody had a control room quite like hers.

Approaching shouts and squeals signaled that her visitors had arrived. A woman with wild curly hair bustled in, followed by a dozen



kids ranging in age from ten to thirteen. The children gaped at the screens and controls covering every surface of the room.

The wild-haired woman bowed to Teri. "Good morning. I'm teacher Elana. Students, this is god Teri. Who can tell me what a god does?"

"Goal optimization director," several children chanted in unison.

"They're the human branch of the government," said a girl standing near the door. Above her shoulder, a tiny elf fluttered on gossamer wings.

Elana nodded and sat cross-legged, gesturing for the kids to join her as Teri started to speak.

"That's right. The two branches of government are the human gods and the quantum AI computers we call quants. The gods and the quants work together to optimize each colony's GNP — its Gross National Purpose. To do that, the quants keep everything in balance across lots of different dimensions. The displays around you show some of those dimensions, like health, balance of trade, peacekeeping, happiness and longevity, but there are thousands more, including dimensions the quants have discovered that we don't even have names for.

"And everything's a trade-off. If you want more freedom, you have to sacrifice some safety, and vice versa. That's why there were so many wars on Old Earth, because people couldn't calculate the trade-offs along each dimension."

"Why can't the quants do everything? What do the humans do?" asked the girl with the elf on her shoulder.

"Quants can find the best way to achieve any goal. But only humans can decide what goals are worth pursuing. Take happiness, for example, which used to be the primary goal until we discovered that purpose is more important. Do we want the greatest collective happiness? Or nobody below a certain threshold of happiness? Or the smallest difference between the most and the least happy people?"

“The quants can optimize for any of those goals, but there’s no objective measure of which is the ‘best’ goal to pursue. It’s about human purpose. That’s why if you want to be a god, you have to study hard at ethics and philosophy.”

She noticed some of the kids fidgeting. “Do any of you want to be a god when you grow up?” she asked, hoping to re-engage them.

Half the hands shot up.

“I want to be a firefighter,” said a girl sitting next to the teacher.

“Don’t be stupid.” A squirmy boy nudged her. “Humans can’t be firefighters. It’s too dangerous.”

“My mom says I can be anything I want to be.” The girl’s chin jutted fiercely.

“I want to be a pet designer,” said the girl with the elf.

“Is it true gods can’t use any mods?” the would-be firefighter asked.

“Yes, that’s true,” Teri sighed. She couldn’t use any augmentation for focus or memory, or play a musical prosthesis, or even wear an exoskeleton suit for strength and balance. At first, the respect and status that came with being a god had more than compensated for the inconveniences. Everybody wanted to be a god, so she’d never questioned the path she’d

taken. Until she’d started feeling that tugging sensation, growing stronger every day.

“Gods have to stay as close to a pure human state as possible, so they don’t start thinking like a quant,” she explained. “It’s about checks and balances. So, no mods.”

There was silence while the children contemplated the enormity of that sacrifice.

“Let’s show god Teri our appreciation for her time today,” Elana broke in. The children called out their thank-yous and turned to follow their teacher. The girl with the elf hesitated at the door, running her hand over an elaborately carved lever.

“Did you make that?” she asked.

“Yes,” Teri replied. “Did you make your pet?”

“Yes.” The elf waved its wand in a circle, releasing a shower of rainbow light.

Teri smiled. “You’re going to be a wonderful pet designer.”

Alone in her control room, Teri quickly entered her planned goal updates and

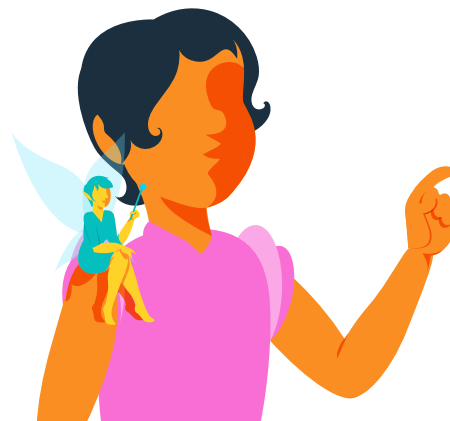
stepped back to watch the monitors cascade through the impacts on one dimension after another as the quants balanced the GNP. But one dimension kept burning in her mind — one she herself had discovered early in her career, recognizing that balance itself has to be counterbalanced with movement, as stagnation is the enemy of purpose.

*I can be anything I want to be.*

Before she left for the day, she ran her hand over her walls, touching each creation and remembering the joy she’d felt as she made them. On her way home she stopped at the warehouse and got herself fitted with an exosuit. A god no more. She cranked up the strength and felt the power course through her limbs. As she bounded toward her quarters, she spoke aloud to see how the words sounded — saxophonist Teri, dancer Teri, fabber Teri. They all sounded perfect.

Around her, hidden but ever-present sensors recorded her movements, her gait, her expression and a hundred other variables, and somewhere deep beneath her feet a quant recorded a minuscule but measurable increase in the GNP of the colony. 🌟

**Jackie Fenn** - Distinguished Vice President Analyst  
CIO





# LUNAR KEY S

by Kyle Rees  
& Ryan Brady



January 2, 2135 | Early Adopters

The subtle thrust of the Raptor engines jolted life into the steel gray cabin. On board the Starship Cameron, Darra Finn's eyes turned toward his lonely viewport. The blood-red face of Mars glowed back. "Like a heliocentric marble flicked into space," Darra's friend, Sam, marveled. "Let's just hope Copernicus plays by the rules," muttered Darra. The first leg of the five-light-year journey was nearly complete. "*Planet B*," it was christened. Everyone and everything was going to be better and happier on magical *Planet B*.

Darra and Sam were among the lucky ones. They, along with roughly fourteen million other survivors, had been selected by the United Earth Space Federation to make the journey to Planet B. While the passengers on the Cameron had their own treacherous path in front of them, it would be selfish to forget that the waypoint on Mars was reached with support from titans of industry and the sacrifices of many common people left to perish in the flooded bowels of Manhattan, the scorched Siberian steppes, and every quarantine center in between.

Moving man and woman from the cradle of civilization to the next frontier was a Herculean effort requiring immense amounts of economic and human capital. UNESCO, the new United Nations and the Origin Exploration Fund had all contributed to the cause. Before the United Earth finally collapsed under the weight of human existence, trillions of bitcoin had been spent on research and development, spacecraft, fuel and astronaut training to build a lifeline across the dark ocean of space.

Darra stared pensively out the sterile, bleach-hazed window as the rocket prepared to enter the Martian atmosphere. "How much crypto you wanna bet you won't be able to hold down your freeze-dried biscuits?" Sam joked. Somewhere behind them, another passenger was listening to a song his grandparents used to play at their farm in Virginia. Darra could barely make out the lyrics, but it was enough for him to hear the ghosts of the dead planet he and the others had left behind.

"And you may find yourself in another part of the world ... And you may ask yourself, 'Well, how did I get here?'"

June 14, 2135 | Terms of Service

Quarantine. Processing. R&R. Everything Darra had done on Mars over the past six months had been executed with tight, rhythmic control. But, like Ravel's Bolero, his wave's arrival had crescendoed to a thunderous fanfare signaling the crash that was to come. The facade of engineered precision was starting to buckle under the pressure of reality.

"Come on, Darra. We have to go now," Sam shouted just outside the door to the barracks.

Darra picked up and examined the homestead papers that had all but guaranteed the bright future that Planet B had once conveyed. It

was this small, but valuable claim to Planet B's mineral riches and resources that had kept him and many others in high spirits along their exile to a new kingdom. Those dreams felt alien now. He ignited his laser welder and set the papers aflame.

The industrialists and global governing bodies that ran planet migration operations hadn't been totally honest about what the settlers' role was going to be. The survivors' true purpose, as Darra and the other settlers had learned, was to become slaves in a new creator economy. Space ended up being a platform that only served to enrich the few who controlled it.

In exchange for their lives, which would have surely expired by now if they had been left on United Earth, settlers were expected to mine and send critical resources and other discoveries back to Mars. Their benefactors weren't interested in going to Planet B themselves. Instead, they would establish a new world order on the red planet. Planet B was real and it wasn't at the same time. It served a higher order purpose in the form of some utopian, palliative cure, which was offered to the settlers so that the elites could consolidate power on Mars.

Darra joined Sam in the barrack's hallway.

"Come on, Dar," Sam chastised, "Where's your spirit?"

"Gone. I think it went up in flames along with the last group of Be'ers the UESF tried to send up," he replied.

Darra wasn't joking. All of the hopeful messaging around humankind's manifest destiny wasn't enough to hide the cracks in the plan's foundation. On top of cataclysmic launch failures, Martian dust storms and worsening morale had all but soured the mood at Camp Cassini. Now everyone was looking for a way to escape the indisputable blockchain ledgers that tracked every movement of every object between Mars and Planet B. That day had finally come for Darra and Sam, and a few hundred others who had joined their cause.

Darra and Sam put their vacuum pressured suits on and left the comfortable embrace of their barracks. They jumped on an all terrain vehicle and sped away, following the ridge line of the ancient crater that had been their home for six months. In the distance they could see the ship that was to be their home for the remainder of the five-light-year journey. A group of hackers had bypassed the system, enabling them, and whoever came with them, to move freely through space and between worlds.



The starport's security system was temporarily disabled. Launch controls were overridden. As Darra, Sam and the rest of the outliers settled into their ship, activity around the starport turned frenetic. With little time to spare, the commander ignited the main engines and set coordinates for Planet B.

The ship imploded. There were no survivors. Meanwhile, on the cold, quiet surface of Mars, a news alert pulsed to everyone's smart devices.

News Alert: Space Renegades Removed From Platform for Violating Terms of Service. 📡

**Kyle Rees** – Senior Director Analyst  
Marketing & Communications Group

**Ryan Brady** – Principal, Research  
Marketing & Communications Group

# THE DAY JOB

by Lane Severson





## “Thanks for tuning in,” Jim Polka said.

“Remember to hit subscribe.”

“It’s no surprise that I love Lewis Robert,” he continued. “He built Ruse Corp from the ground up. He inspires millions of people with his weekly company addresses. I mean, the guy’s face is on my shirt. He told us: ‘We are all human, so be kind.’ That’s basically my life motto now. His personal fitness routine has kept him looking like he never ages.”

“But I’ve realized that he’s more than all of that. Think about when Earth was doomed. Who was it that built the tech to colonize our new home? And who was it that unified the people of Earth to make it happen? It wasn’t the politicians, it wasn’t the religious leaders, it was Lewis. Lewis is more than the CEO of Ruse Corp, leader of Planet B. He’s basically the leader of our new religion.”

Jim paused and gulped his Noise Pony energy drink. There were a lot of Lewis Robert fanboy streamers, but Polka was tops. He streamed every Tuesday night, immediately following Robert’s companywide

address. Tonight’s viewer count was over ten million, which was a personal record for Jim and had to be a record for Ruse Stream.

Suddenly, the stream died. “What the ... ?”

There was a knock at the door. Jim’s manager at Ruse Corp stood outside.

“What are you doing here, man?” Jim exclaimed, rushed and distracted. “Kind of a bad time to be honest, I’m in the middle of the stream and it just crashed on me!”

“Jim, forget about the stream,” the manager replied. “You’ve got bigger issues. I don’t know what you said but Lewis asked to see you. Now.”

“Lewis Robert ... wants to talk to me?”

“I didn’t say he wanted to talk to you. I don’t get the impression that he wants to grab a beer. His people called and told me to get over here and bring you to HQ. So here I am. Let’s go.”

The manager dropped him off at Ruse Corp. “They’ll tell you what to do inside.”

Jim entered the lobby and was directed by the robotic assistant, who called herself Pam, to remove his coat and enter a body scan.

“Tight security, huh?” Pam didn’t reply to his attempt at a joke.

“Your height and weight are within parameters, hun. So we can proceed. We are going to need to review and sign some documents.” Pam handed him a small stack of papers and a pen.

“Pam, I’ve already got an NDA with the company.”

“This one is a little more detailed, hun. And it includes the updates to your employment status.”

“My employment status?”

“Yes. Now, can you log into the talent market and activate your new tasks?”

Jim accessed his job market. A single job with no title displayed.

Due tomorrow. Jim attempted to find more information, but all he could find in the general description was an additional skill requirement: “speechwriting.”

“Pam,” Jim asked, nonplussed, “is something wrong? I’m only getting one job option.”

“I’m not detecting any errors in the system, hun.”

“Mmm-kay. But I thought I was supposed to be meeting with Lewis Robert. Couldn’t I just have done this at home?”

“If you could just accept the job, Jim, that would be helpful.”

He accepted. Pam printed a note, folded it, placed it in an envelope and handed it to him.

“What’s this?” he asked.

“Your job description, hun. Good luck and good night,” Pam said, as she navigated behind the main desk and powered down.

Jim unfolded the note and read his assignment. Write and deliver a company address for Lewis Robert. Jim attempted to ask Pam if this was a joke, but there was no response. “No joke detected, hun,” he thought to himself.

“What would Lewis Robert do?” Jim wondered aloud.

Jim spent the night in the lobby writing. By the next morning he’d written a draft that he

was happy with. As if on cue, Pam rebooted.

“Have you finished writing it?”

“Yeah I’ve got a draft that he will like.”

“It doesn’t matter,” Pam said. “It matters that Lewis has something to say. Not every company address is printed on a t-shirt.”

She led him to an empty film studio. “Can you deliver the speech?”



“Am I recording it for Lewis or something?”

“Yes. You are recording it for Lewis. So make it the best darn speech you’ve ever done.”

Later that night, at his apartment, Jim celebrated with a few friends. They thought it was for hitting a new streaming record. “You’ll be bigger than Lewis Robert soon,” one said. They all laughed.

The next Tuesday, Jim watched Lewis Robert deliver his speech in disbelief. This wasn’t just a close imitation of Jim’s speech.

It was Jim’s speech. It was Jim speaking. Word for word, intonations, hand gestures, facial expressions, even the moment where Jim had coughed during his delivery and taken a drink of water. The face and voice on the screen belonged to Robert Lewis. But it was Jim underneath. “This is a deepfake,” Jim said to no one.

At that moment, Jim realized the social calculus at stake, and why the ruse had to go on: to come clean would lead millions of disillusioned Lewis Robert fans to cause mayhem. To tear down their CEO, the president of the planet, and even the priest of their new religion. Better to perpetuate a lie that assures stability, as opposed to tearing it down and entering into chaos.

As Jim began prepping for his live stream, his manager arrived at his apartment.

“Figured you were about to stream. The board asked that I deliver your bonus in person,” he said. “They were impressed.”

“And what did Lewis think?” Jim asked.

The manager paused, then answered. “I think you’d know better than anyone at this point. Have a good show.” 🎯

**Lane Severson** – Senior Director Analyst  
Employee Experience Technology



# Future Ambition

by Michael Chiu

# “Do you work to live, or live to work?”

It was an obnoxious and unfair question for the AI to ask during a job interview.

The off-shouldering of work from humans to AI had been tumultuous, and the answer to this question was convoluted. But Desmond couldn't say that. He was in the hot seat for a job interview to become a wedding planner, under the watchful “eye” of the AI. It was monitoring his heartbeat, facial microexpressions, pupil dilation and dozens of other measurements, which would, in addition to his answer to the question, be synthesized into a hire/no-hire recommendation.

That was six months ago.

He was now in the hot seat once again, being berated by his boss.

Desmond had gotten the job, but since then the AI had ranked him dead last out of 34 wedding planners. While he wasn't surprised to receive such a poor performance review, his boss's sharp words were only the second-most distressing thing to him right now.

The first-most was Valen.

As in, Valen The Humblebrag.

Saboteur.

Taker Of Credit Not Earned.

Valen was ranked first out of 34, and had gotten there by every means of deception known on Planet B. He wasn't shy about publicizing his rank, and was particularly fond of witnessing Desmond fail. “Snide comments” was a charitable way to describe the words Valen hurled at Desmond.

Both were in the ferociously competitive field of wedding planning. Despite the power of AI, its takeover of wedding planning was, imperceptibly at first and then more forcefully, met with a backlash against the machines. It turned out that machine algorithms were maladapted for one of the most human of events: a wedding, with all of its emotion and pageantry. How could such a uniquely emotional experience be designed by a machine? For the betrothed with money, a human-designed wedding was the pinnacle of voguishness, while machine-designed weddings were relegated to commodity status.

This meant human wedding planners had to deliver.

But Desmond was failing.

Mods — augmentations of human abilities — offered some hope, yet Ashley, Desmond's girlfriend, was opposed to them. Mod procurement was highly regulated, but beneath official policy was a thriving underground market. With the right connections and money, a visit to a “mod spot” — often the basement of a mod tech's house — allowed visitors to leave with any number of new capabilities.

Facing job termination, Desmond and Ashley agreed on a single mod from the offworld mining industry which helped miners stay awake longer. Ashley worked in this industry and had seen firsthand how these mods were safe for miners. And so the two of them found a mod spot, where the tech uploaded Desmond's consciousness to a server as

a backup in case anything went wrong.

The night following the mod implantation, Desmond slept for two hours.

And the next.

And the one after that.

The mod was living up to its promise.

But while he now had twenty-two waking hours, Desmond eventually realized that this was merely the quantity side of the equation. The quality side of his work hadn't changed — he just had more time to produce his own brand of shoddy work.

Desmond didn't tell Ashley about his second mod, one originally designed for traffic police to monitor the details of millions of Planet B vehicles. Exiting the mod spot, Desmond uploaded to his brain the guest lists for his six weddings, plus each guest's food preference, seat location, transportation and lodging.

The combination of twenty-two-hour workdays and the ability to recall ten thousand wedding guests' details began to take hold. Desmond's ranking began to climb, ascending from 34 to 29. His clients increased in prestige, the weddings increased in complexity and his business from referrals expanded. Even Valen's insults subsided.

It didn't take much for Desmond to convince himself that he needed another mod

to regulate his hormones during stressful situations, and that he wouldn't tell Ashley about that one, either.

But Desmond did choose to tell Ashley about his next project: the avatars.

Powered by AI, avatars simulated some of humankind's greatest minds, and were based on all available information on these individuals — articles, data, books, speeches and the like.

Desmond assembled a digital avatar board of advisors created from history and even literature:

Marie Curie, physicist.

Maya Angelou, poet and activist.

Sherlock Holmes, detective extraordinaire.

Sun Tzu, military strategist.

And Gracen Platt, inventor of the Lux interplanetary communication device.

Together, they provided Desmond with potent advice. Should he transfer to the adventure weddings division? How to make himself indispensable to his boss? How to deal with Valen?

Desmond's mods and avatars were a devastating combination. His ascent up the rankings was swift and he soon overtook Valen, much to the latter's disbelief.

Desmond's boss, once his harshest critic, saw

him as the lifeblood of the company. Desmond rubbed elbows with the Planet B glitterati, and his wedding bookings came from those with money, power, fame, or all three.

Amidst the dizzying fame, Desmond almost missed Ashley's message on the Lux. She was on a three-week mining project in the asteroid belt.

"You've continued to mod yourself behind my back," the message began. "Surprised that I knew?"


"I told you not to pursue more mods but you did it anyway. And now you've changed. You're not the Desmond I met years ago.

"The backup copy of your consciousness that you uploaded before your first mod? I had the mod tech make an avatar out of it. And honestly, it's so much better being able to talk to an authentic version of you, instead of what you are now.

It's best if we take a break for a while. I'm removing you from my Lux."

Desmond's mod worked furiously to produce the feel-good endorphins to counteract his pain, but it wasn't keeping up.

His five avatars stared at him in silence. 🌟



**Michael Chiu** – Vice President, Analyst  
Customer Experience

# Owning Yourself

by Swati Rakheja



# Jack could not keep his attention on work.

His mind kept drifting to the prospect of bringing their son home from the embryo generation and development center. He looked again at the update from last night:

*“Dear Mr. Jack, Development of your progeny (PBIS — 1784PSN23a), derived from Jack (PBIS — 1297HBM04) and Sarah (PBIS — 1364ILF78) is on track. Expected release: 23 March 2045.”*

He directed Lewis — his digital assistant — to check with Sarah, whose workplace was nearby, to see if she wanted to call it a day. Sarah, being in the same state, was more than happy to head home. She asked to meet him at the nearby supermarket to pick up some household stuff on the way.

As he reached the supermarket, he decided to step inside rather than wait for Sarah. He warily noticed how all the shelves were now displaying products appropriate for a newborn. He always got annoyed with Sarah for keeping the privacy setting for her Planet B Identity System (PBIS) low, indirectly opening his associated profile attributes



and preferences as well, and automatically turned up the privacy settings for his PBIS up a notch. The fact that he would have to roam the shelves to look for relevant products, instead of finding them on the first digital display, never seemed to irk him. Rather, it gave him a feeling of nostalgia for the Earthian ways.

Just as he started to look around, Sarah joined him, brimming with excitement. She immediately started looking at the displays, only to turn back with an exasperated look after finding random products being displayed there. “Not today, Jack. Those recommendations would help save time. And not to mention the extra discount we would get. In fact, I was hoping we could actually completely open our PBIS profiles today.”

“But why would you want everyone to know what you like or not? It is beyond my comprehension, Sarah! We have talked about this before, I do not like leaving breadcrumbs of my choices and interactions to be misused.”

“I know, Jack. But aren't we about to embark on a new journey soon? I think it would be good to start giving the ways of Planet B a chance.” And without waiting for his response, she turned down the

privacy guards for both their profiles.

The system, now flooded with all the information that had been gathered about them since they had stepped onto Planet B, revised the products displayed to factor in everything, from their age and race, to where they lived, and even what their friends were purchasing.

As Sarah shopped, Jack grudgingly conceded that there were actually some good recommendations.

“See how quick this was, compared to your usual shopping escapade,” remarked Sarah as they completed their shopping and started walking toward the checkout counter. But halfway through, he recalled that he had already opened his PBIS profile today and said “Guess the system would have automatically billed us. Let’s head out.”

But to his surprise, the automatic barriers wouldn’t budge. He looked at Sarah with confusion. With a knowing smirk, she said, “You just opened your PBIS profile, dear. Your financial information is still private. To link that, you specifically need to make that choice in your PBIS profile.”

As he walked back to the checkout counter, Jack thought to himself, perhaps Sarah was right. He had never given the technologies


of Planet B a fair chance. Science, especially around data privacy, had progressed stupendously on Planet B.

As they settled in the Pod and set the destination to home, Jack asked Lewis to read his messages. Among the many congratulatory notes was a reminder from Elliptica, Planet B’s AI governance system, to share the choices for their son’s PBIS profile to be encoded in his biometric chip. These chips contained all information for the individual, his unique PBIS ID and his preferences. As parents, they could make initial preferences for their son until he was wise enough to make his own choices.

He immediately looked at Sarah and knew this was a conversation they could no longer avoid. But before Sarah could say anything, Jack began, “I understand you want our son to embrace the world with openness and trust, like you do, but I have my reservations. You were among the first ones to migrate from Earth once Planet B was deemed habitable, but I took a very long time to reach Planet B. I genuinely feel I was discriminated against because of where I was from on Earth. So when presented with an opportunity to obscure my identity on Elliptica, I gladly accepted it, and I want our son to have the same option.”


“I understand the need to keep your information personal, Jack, even if I may not agree with it. But Elliptica is different from how things were on Earth. It ensures a fair and open system, and you still own and control your identity. It is unlike any government- or organization-controlled ID issued on Earth. Every person on Planet B is assigned a unique identity on arrival, and it serves as their only identifier for everything on the planet, from medical access to getting a job. And as you said, it is a matter of choice, and Elliptica allows us to choose. Please give it some more thought before making a decision.”

As they zoomed ahead in their pod, Jack reflected on a particular thing Sarah had said — “matter of choice.” Perhaps that was, indeed, the most important thing: being able to make a choice. Jack realized that he had been so determined to keep his identity and choices private, he had been unable to derive any benefit from the flexible ways of Planet B.

As they reached home, he directed Lewis to set the privacy settings on his son’s profile as moderate. To share or not to share? His son could make his own choice in his own time. 



**Swati Rakheja** – Principal, Research  
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# You Can't Buy Tomorrow

by Mark McDonald



# Tara sat down

rubbing her leg to work out a cramp she had picked up on the walk from her house. She had delayed this to the last minute. “Can’t turn ten ‘till you talk to the old men,” her brother reminded her.

Tara cleared her throat. “Question: What was it like at the start?”

*Response: Project 2207, Darius Senna, aged 105, recalling the founding of Pantos.*

The front of the room darkened. “Tara. The name means star,” came a man’s voice from the darkness.

“Dad says it’s also a lubricant that has gone bad, ‘Tar — ahh!’” The room got even darker.

“We call ourselves Pantos. The fifth wave of Planet B colonists, B5, like the vitamin,” the man’s voice continued.

Darius Senna walked out of the darkness. He was wearing a blue collarless shirt rolled up at the sleeves, dark pants and brown boots. Tara noticed his rough hands, and his face, lined from UV rays. A bench appeared. He sat down.

“We were not the first. The first were the explorers. They discovered Planet B, determined it could support life, and summoned us to our new home. Then came ships, filled with those who could afford to leave Earth behind.”

Senna leaned back. Tara noticed the old style comms implant on his wrist. “Six centuries ago, the English sent ships carrying goldsmiths, jewelers, governors and soldiers to Jamestown. They sought to civilize their ‘new world.’ Likewise, the first ships to Planet B carried engineers,

bankers, officials — the cream of a curdled civilization.”

Looking out the window, Darius continued: “Those first ships were technological marvels. Gossamer solar sails, filled with technology and terraforming equipment. They landed in the northern hemisphere of Planet B. When their technology failed, they starved, just like the colonists at Jamestown.”

He paused and looked at Tara. “After three more waves, some of them are still around, eating from waste regenerators, asking their tech why it doesn’t work. We don’t see them much. We think about them even less.”

Darius leaned forward, clasping his hands, just like Tara’s father did when making a point. “We Pantos understand — the physical world feeds the digital world. When the physical does not work, the digital does not matter.”

“Old Earth technology changed in the early 21st century. It turned inward. It became obsessed with experience, entertainment and consumption.” His face hardened. “Before then, technology had made people’s lives better. Then society went digital, and consumption mattered more.”

Darius unclasped his hands. “Data replaced reason. People focused on themselves. Technology meant looking down at a screen, not up at the world around them. People thought it was wonderful. Screens made them feel better.”

He leaned back. Tara noticed the scar down the inside of his left arm. No one had scars anymore, not since the invention of Dermoplast. Darius saw her staring and, almost under his breath, said: “With their narrow datasets, myopic algorithms and self-centered beliefs, they couldn’t see what was really coming. And they never did.”

“I had just turned twenty-seven,” Darius said. He paused, lost in a memory.

He resumed, “We Pantos are not Luddites. We are some of the finest innovators and engineers humanity has ever known. Old Earth technologies were advanced, but consumptive. They were great for solving little problems. Distributing products instantaneously, keeping their users’ attention, showing each other how successful they were.”

“But when the big problems came, technology could not handle it. The heat, the drought, the pandemics, the inequalities, the authoritarian states. This was the world as it really was, not how it appeared online. Their technologies spent what resources they had, but could not create more. When their inherited wealth dried up, it all fell apart.”

“You know why we Pantos tell each other, ‘You can’t buy ...’”

“... Tomorrow,” Tara finished. She heard that at least ten times a month.

“Right,” Darius replied. “We say that when it’s time to get to work.”

“The ‘northerners’ brought Earth’s ethos of control and exploitation. Digital entertainment, not physical engagement. They binged on culture as they starved and froze to death. If you go up north you can see the graves of trillionaires, and screens looping

videos demonstrating their importance.”

Darius went silent.

Tara waited, unsure of what to do next. “If we are not the first, then when did we get here?”

Darius looked Tara directly in the face. “We came in the last wave. We came on outdated ships driven by ions. The ships were cannibalized once we landed on the southern hemisphere, far from the first four failures.”

He smiled, “The first waves came to Planet B in space limos. Pantos came in space beaters.”

“Pantos went to work. Our technology fits our hands, not our eyes. We built our homes, rather than having them printed. Building them ourselves proved we were here to stay. Doing things yourself teaches you the true costs and benefits of your actions.”

He paused for a moment, and said:

“Tara, remember to feed the Briax when you get home.”

She knew. Doing builds ownership and responsibility; consuming builds nothing but your waistline.

Darius resumed: “Technology is part of our agency. Planet B sustains life, but we are building a world to ensure our minds stay broad; we think before we act. We make mistakes, like we did at Junction.”

He rubbed the inside of his left arm.

“Failure is acceptable when we learn from it. Unacceptable when it is a cost of doing business, or called an externality.”

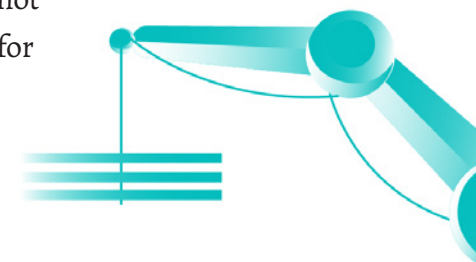
“We stay strong, acknowledging challenges and celebrating progress. Technology encourages contribution, not consumption. Contribution brings meaning. Meaning motivates innovation and improvement. If it does not work for all of us, then it does not work well enough for any of us. We have much work to do. You know...”

“You can’t buy tomorrow,” Tara repeated, reflexively.

The room brightened. Senna was gone, as was the bench. A woman’s voice spoke up. “Congratulations, Tara. Welcome to your next decade.”

Tara stood up. As she was leaving, she thought she heard the woman say: “Another turning ten. A blessing.”

“Yes,” came Senna’s reply. “Old enough to understand, and young enough to care.”



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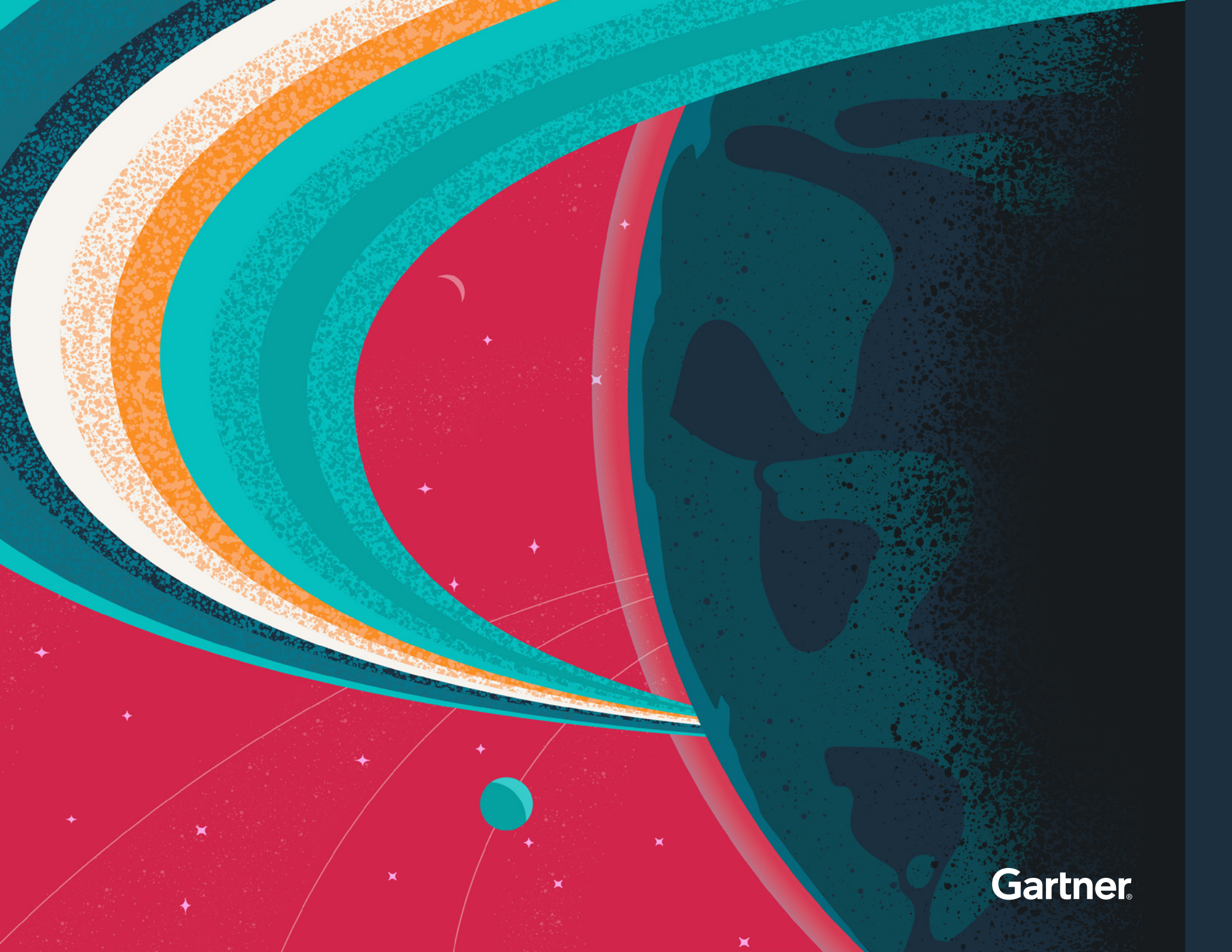
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