

The Great Company Adventures · Book 42 of 50

MICROSOFT
**THE
INVISIBLE MACHINE**

seven doors, twelve mental models, and the windowless building that quietly holds
the whole world's homework.

"Discovering the businesses that built the modern world"

An independent, unofficial educational work · not affiliated with, endorsed by, or sponsored by Microsoft.



THE GREAT COMPANY ADVENTURES

Discovering the businesses that built the modern world.

© 2026 Omaha Investments. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form without the prior written permission of the publisher, except for brief quotations in reviews and other uses permitted by U.S. copyright law.

This is an independent, unofficial publication. It has not been authorized, sponsored, endorsed, or approved by Microsoft. Microsoft and related marks are trademarks of their respective owner; used solely for identification, education, and commentary. All marks are used solely for identification, education, and commentary (nominative fair use).

Warren Buffett, Charlie Munger, and Benjamin Graham appear as fictionalized storybook mentors. Their dialogue and actions are imagined for storytelling purposes and do not represent their actual words or views, nor any endorsement of this book by them.

This book is a work of educational fiction for young readers. It is not investment, financial, or professional advice, and nothing in it is a recommendation to buy or sell any security.

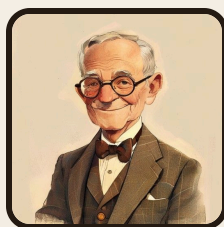
Illustrations were created with AI image tools; the text was written with AI assistance. All content is reviewed and edited by our editorial team.

For readers aged 7 and up. First Kindle edition, 2026.
Published by Omaha Investments.

MEET THE CHARACTERS



SIRI



BEN



WARREN



CHARLIE



KIRA

A curious girl named Siri, a wise old teacher named Ben, and his student Warren with Warren's partner Charlie — together discovering the businesses that built the modern world, one adventure at a time.

THE GLOBAL 50

One great company per volume · Fifty adventures, one modern world

SPACE & EXPLORATION

1. SpaceX — *"The Fire That Comes Back"*

MANUFACTURING & ENGINEERING

2. Toyota — *"The River That Builds Cars"*
3. Siemens — *"The Factory That Builds Factories"*
4. Caterpillar — *"The Machines That Move Mountains"*
5. Boeing — *"The Bird With Six Million Pieces"*
6. Airbus — *"The Plane Four Countries Built"*

ENERGY & INDUSTRY

7. Shell — *"The Sunlight Buried at Sea"*
8. ExxonMobil — *"The Ancient Sunlight Machine"*
9. GE Vernova — *"The Wheel That Makes Lightning"*

COMMUNICATION

10. AT&T — *"The Voice Inside the Wire"*
11. Qualcomm — *"The Whisper in the Air"*
12. Ericsson — *"The Towers That Talk"*

TRANSPORTATION

13. Tesla — *"The Car With No Engine"*
14. John Deere — *"The Machine That Feeds the World"*
15. UPS — *"The Promise in a Brown Truck"*

INFRASTRUCTURE

16. ABB — *"The Arms That Never Tire"*
17. Schneider Electric — *"The Guardian of the Grid"*

MATERIALS

18. Corning — *"The Thread of Light"*
19. DuPont — *"The Inventors of Almost Everything"*

SCIENCE & TOOLS

20. 3M — *"The Factory of Ten Thousand Ideas"*
21. Bosch — *"The Spark in Every Machine"*
22. Honeywell — *"The Dial That Tames the Weather"*

MEDICINE & BIOTECHNOLOGY

23. Pfizer — *"The Shield in a Tiny Vial"*
24. Roche — *"The Detectives of the Blood"*

25. Novo Nordisk — *"The Key to a Billion Locks"*

26. Johnson & Johnson — *"The Little Bandage That Grew"*

FOOD & AGRICULTURE

27. Nestlé — *"The Cup That Wakes the World"*
28. Cargill — *"The Invisible Harvest"*

FINANCE & COMMERCE

29. Visa — *"The Handshake Inside the Card"*
30. Mastercard — *"The Two-Second Trust Machine"*
31. Walmart — *"The Store That Never Runs Out"*
32. Costco — *"The Treasure Warehouse"*
33. FedEx — *"The Race Against the Sun"*

CONSUMER INNOVATION

34. Disney — *"The Factory of Dreams"*
35. LEGO — *"The Brick That Builds Anything"*
36. Sony — *"The Pocket Full of Music"*
37. Coca-Cola — *"The Secret in the Red Can"*
38. Nike — *"The Shoe That Learned to Fly"*

LUXURY & CRAFTSMANSHIP

39. Rolex — *"The Heartbeat on Your Wrist"*
40. LVMH — *"The Suitcase That Conquered the World"*

COMPUTING & DIGITAL CIVILIZATION

41. Apple — *"The Glass That Thinks"*
42. Microsoft — *"The Invisible Machine"*
43. Google — *"The Library With No Walls"*
44. Amazon — *"The Box That Crossed the World"*
45. NVIDIA — *"The Brain Made of Sand"*
46. Intel — *"The First Thinking Chip"*
47. TSMC — *"The Invisible City"*
48. ASML — *"The Machine That Prints With Light"*
49. OpenAI — *"The Machine That Learned to Talk"*

THE FINAL DISCOVERY

50. The Company Yet to Be Built — *"The Adventure You Will Build"*

THE WORD THAT ISN'T A WORD

Midnight. Homework finally done. And Grandpa Ben's brass compass just started... trembling.

TIK-TIK

It spun. Locked. Pointing straight at—

SPIN

Wait. Seriously?

Down the hall: Mom sending photos. Dad streaming a film. Grandma laughing on a video call.

It's never done THIS before.

Where is all of it GOING?

A girl with brown hair is lying in bed, looking at a laptop screen. The screen shows a blue loading circle. The room is dark, and the laptop is on a desk.

On her screen, three small words she had read a thousand times without ever once thinking about them.

A girl with brown hair is looking at an open diary. The diary is glowing with yellow stars. The girl is looking at the diary with a surprised expression.

The diary flipped open by itself. Fresh ink.

Saved to the cloud.
WHICH cloud?

“Every photo, every game, every homework you save — something invisible is holding it, little one. Go and find the machine.”

★ WORTH REMEMBERING

There is no cloud in the sky. Your photo is not floating anywhere. It is sitting on a real machine, in a real building, in a real place you could walk into. Tonight's mystery: **where is it, and who is holding it?**

The screen rippled — and a whirlpool of blue light yanked her in.

WHOOSH



Here we GOOO!



SIRI'S SECRET NOTEBOOK

Biggest mystery yet ☁

- ① If the cloud is a PLACE, where is my homework right now?
- ② Grandpa says this invisible thing built a giant company. Prove it, compass.

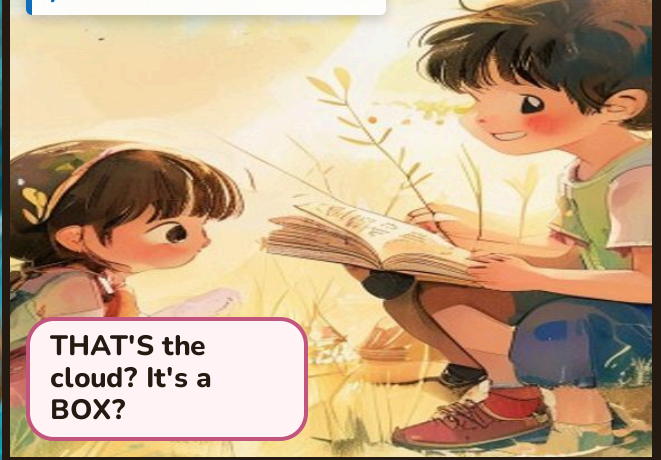
THE BUILDING WITH NO WINDOWS

She landed in a corridor of humming cabinets that ran out of sight. Thousands of tiny lights blinked.



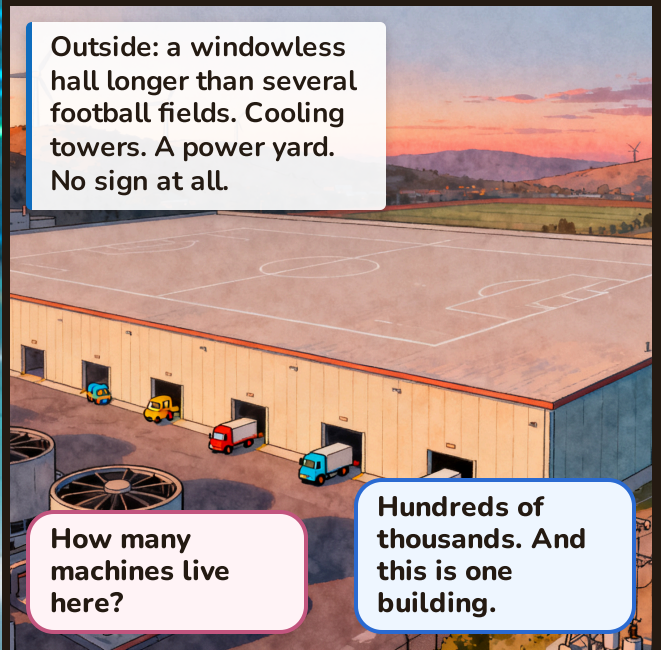
It's a CITY of fireflies!

An engineer stepped out holding a flat metal box. *"I'm Kira. I look after the cloud. This is a piece of it."*



THAT'S the cloud? It's a BOX?

Outside: a windowless hall longer than several football fields. Cooling towers. A power yard. No sign at all.



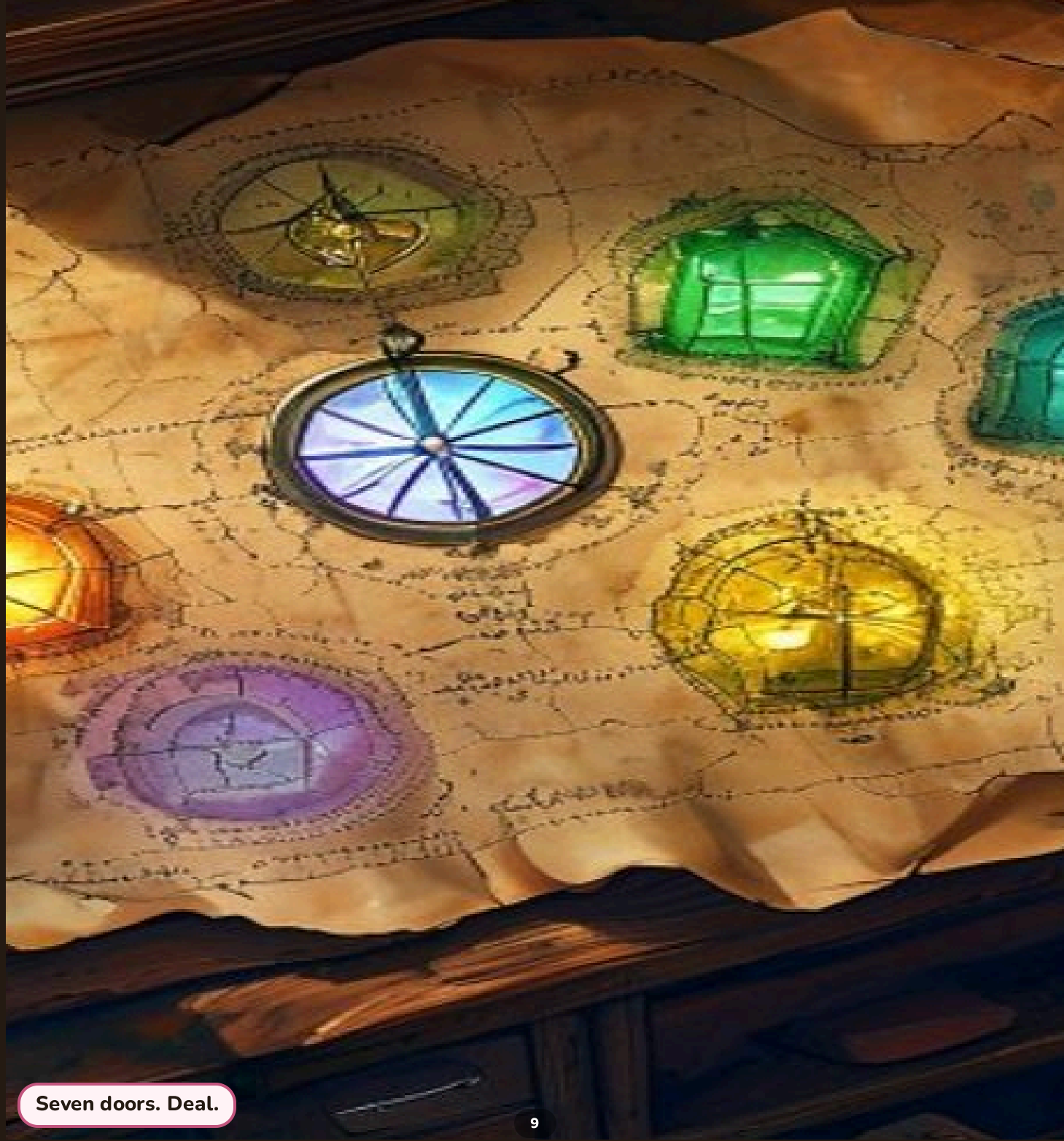
How many machines live here?

Hundreds of thousands. And this is one building.

★ WORTH REMEMBERING

A data center is a warehouse full of computers that never sleep. Hundreds of them exist across the world. Together they hold your photos, your school files, and most of the internet you touch each day.

Kira unrolled a parchment map. Seven glowing doors.
"Seven secrets. Open them all and you'll understand the cloud."



Seven doors. Deal.



SIRI'S SECRET NOTEBOOK • THE QUEST MAP

 1 THE ALPHABET — how does a file become numbers?

 2 THE PARCELS — how does it travel?

 3 THE ROAD — what is the road made of?

 4 THE MEMORY — where does it SIT?

 5 THE BREATH — why is it so cold in here?

 6 THE HEARTBEAT — what if the power dies?

 7 THE CROWD — who does the thinking?

Let's GO 

AN ALPHABET OF SWITCHES

3a Door One: everything becomes numbers

Door one opened onto a road of tiny switches. Some up. Some down. Marching into the distance.

"Switches speak two words: on and off. One and zero." Siri folded her fingers like switches — and counted past a thousand.

1,023 on ten fingers?! I've been WASTING my hands!

"Then we agree on a codebook. This pattern means A. That one means a shade of blue. Agreement is everything."

So a photo is just... an agreement?

My essay is a line of light switches?!

★ WORTH REMEMBERING

A file is nothing but a very long number, written in switches, plus a shared rulebook for reading it. Change the rulebook and the same switches become music instead of a photo. **Meaning lives in the agreement, not the switches.**

★ WORTH REMEMBERING

This is why software is such a strange business. Copying a bridge costs another bridge. Copying a number costs almost nothing. Hold that thought — it explains a company we haven't met yet. 📁



SIRI'S SECRET NOTEBOOK · DOOR 1 UNLOCKED

File → numbers → switches → a shared codebook. Computers count on two fingers; I can count to 1,023 on ten. Telling EVERYONE at school 🙌

TORN INTO PARCELS

4a Door Two: nothing travels in one lump

Door two: her homework was torn into dozens of numbered pieces, each one sailing off down its own stream.



You RIPPED my essay?!

Watch the harbour.

At every junction, a little signpost robot pointed each parcel down whichever road was least crowded.



Nobody plans the whole trip?

Each junction just picks the next step.

★ WORTH REMEMBERING

This is the deep trick of the internet: no central boss. Every parcel — a **packet** — is passed junction to junction, each one deciding only the next hop. Chop off a road and the parcels simply flow around it. 📦

One boat tipped over. The harbourmaster raised a lantern and asked for that ONE parcel again.



So a hiccup costs one piece, not the file!

Kira sent a dot around the globe and back. It returned before Siri could say the word 'ocean'.



It went to another CONTINENT and back?

SIRI'S SECRET NOTEBOOK · DOOR 2 UNLOCKED

Packets = small numbered parcels, each finding its own road. No boss anywhere. Lose one → resend one. That's why the internet bends but hardly ever breaks. 📦

THE ROAD MADE OF LIGHT

5a Door Three: a road thinner than hair

Door three glowed. Inside a strand thinner than a hair, pulses of light raced along, bouncing as they went.

"Hit the wall at a shallow enough angle and light doesn't escape. It bounces. Every single time."

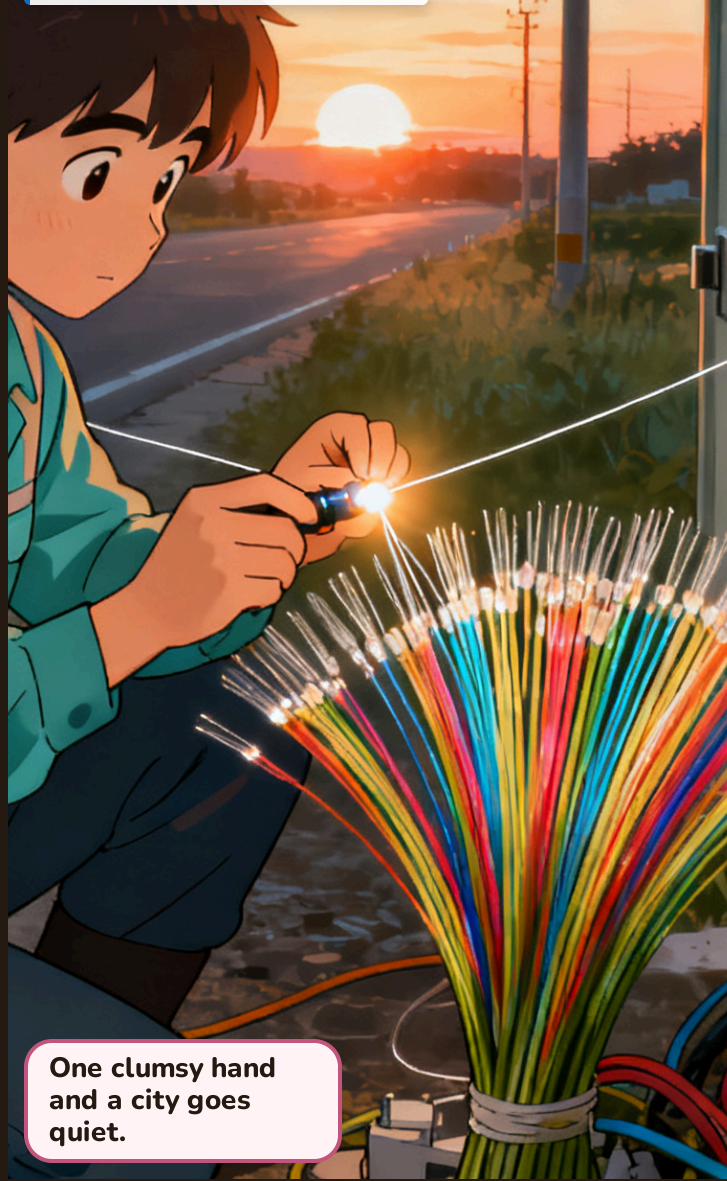
The road is a glass STRAW?

Like skipping stones on a pool!

★ WORTH REMEMBERING

Total internal reflection. Steep light escapes the glass; shallow light reflects perfectly. So a fiber traps light and carries it for miles with almost nothing lost. One strand can hold millions of conversations at once. 💡

At dawn, a technician joined two fibers with a tiny flash of heat. Coloured strands fanned out like flower stems.



One clumsy hand
and a city goes
quiet.

*"Between continents, your
parcels swim — as laser
light, in armored cables
lying on the ocean floor."*



My homework
swims past
WHALES.

★ WORTH REMEMBERING

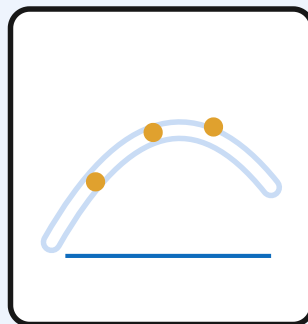
Almost all traffic between continents runs through undersea cables, not satellites: light in glass is faster over long distances and far cheaper. A cable no thicker than a garden hose can carry a whole nation's internet. 🌊



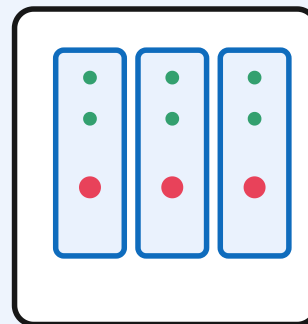
HOW A FILE REACHES THE CLOUD



CUT INTO PARTS
small numbered



LIGHT IN GLASS
bounce, bounce



THREE COPIES
three places



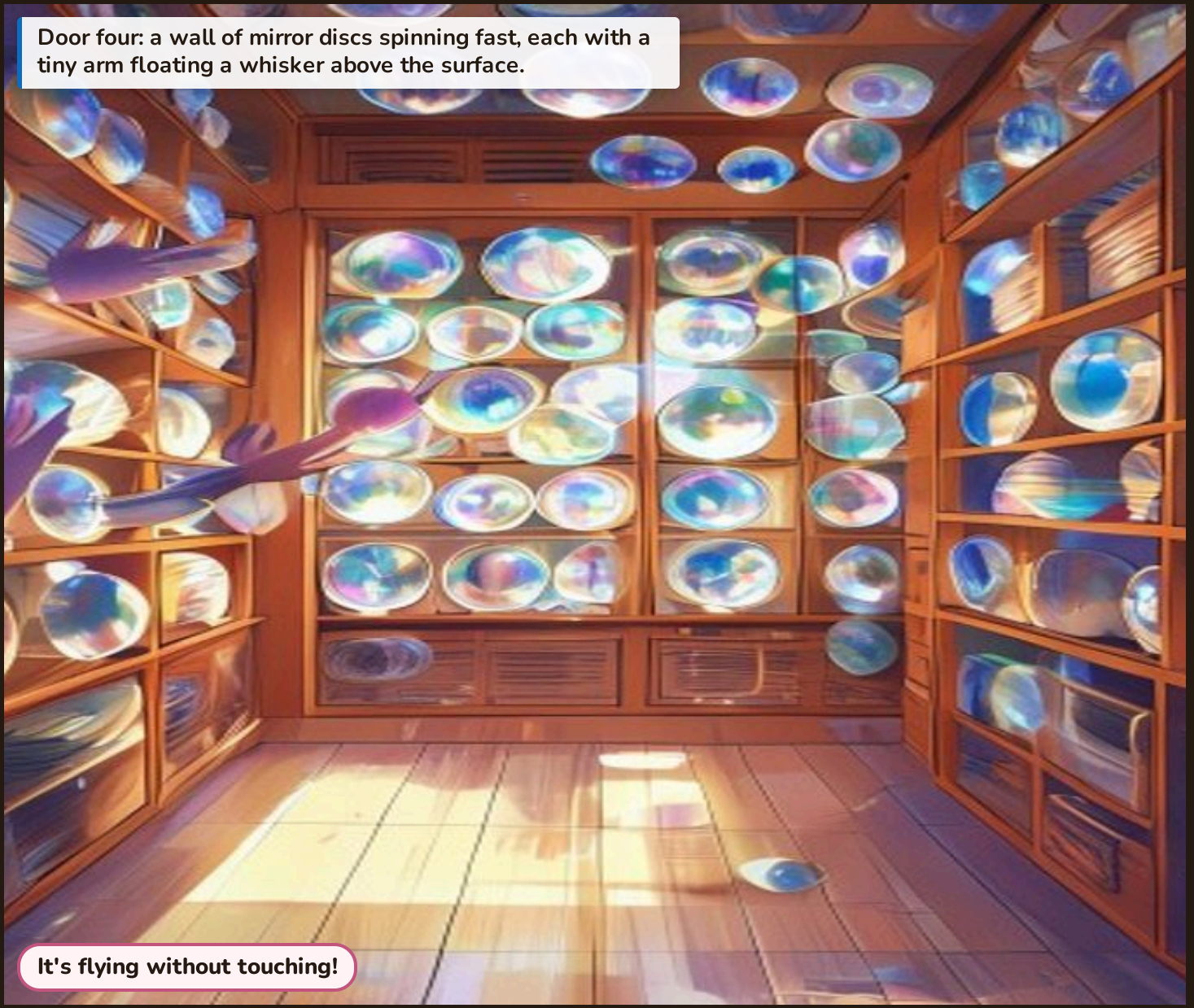
SIRI'S SECRET NOTEBOOK · DOOR 3 UNLOCKED

Light bounces down glass and never escapes.
Cables cross OCEANS. Somebody kneels in a
roadside box at dawn splicing hairs of glass so
my video doesn't stutter. Heroes. 🌊

WHERE MEMORIES SIT DOWN

6a Door Four: the resting place

Door four: a wall of mirror discs spinning fast, each with a tiny arm floating a whisker above the surface.



It's flying without touching!

★ WORTH REMEMBERING

A disk arm hovers closer to the surface than a smoke particle is wide, while the disk spins thousands of times a minute. If it ever touched, the data would be gone. It never touches. For sixty years, it never touches.

"The fast machines don't spin at all. Millions of tiny glass jars, each either holding a spark or not."



No moving parts.
Just... decisions.

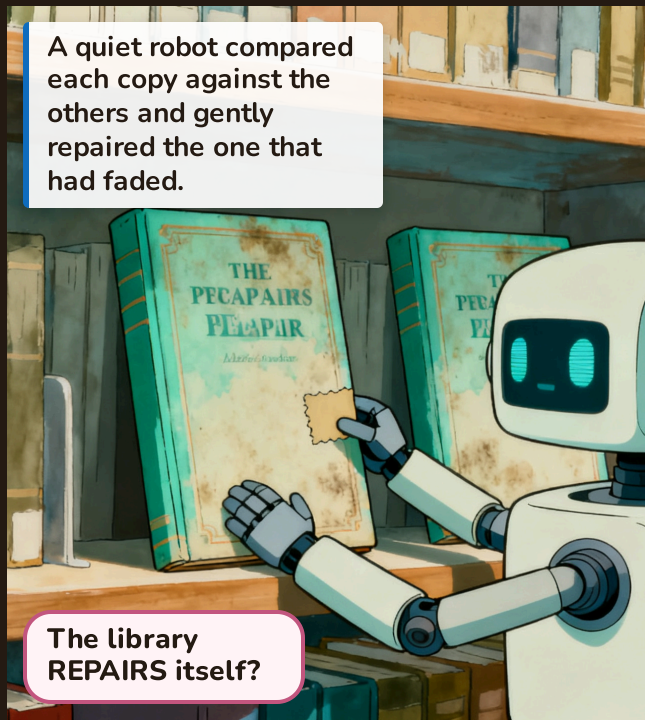
"And because everything breaks eventually, your file is copied three times, into three separate places."



Isn't three copies
wasteful?

It's much
cheaper than
losing your
homework.

A quiet robot compared
each copy against the
others and gently
repaired the one that
had faded.



The library
REPAIRS itself?

SIRI'S SECRET NOTEBOOK · DOOR 4 UNLOCKED

Spinning discs (arm never touches!) + jars of sparks. THREE copies in three places, checked against each other and repaired. Assume everything breaks — then survive it anyway. 📀

THE BUILDING THAT BREATHES

7a Door Five: why it's so cold in here

Door five was warm. *"Every switch that flips gives off a whisper of heat. One whisper is nothing."*

And a trillion whispers?

A bonfire. That's the problem.

In the aisle, cold air poured in at their feet and warm air climbed away above. Siri's ponytails lifted.

The building is BREATHING!

Inside an open server: rows of fans, chips wearing little finned metal hats, a river of air pulled across them.

Tiny hats to throw heat away!

Outside, water ran in a closed loop through cooling towers, carrying the heat away to the sky.

Water carries heat WAY better than air.

★ WORTH REMEMBERING

Roughly a third of a data center's electricity has historically gone to cooling, not computing. So engineers chase it hard: warmer aisles, closed water loops, cold climates, and pumping the waste heat into nearby homes. 🌊

📖 SIRI'S SECRET NOTEBOOK • DOOR 5 UNLOCKED

Computers are extremely clever radiators. Cold aisle in, hot aisle out, water loop to the sky. Half of building a cloud is not computing at all — it's PLUMBING. 🔥 ➡ ❄️

THE HEARTBEAT THAT CANNOT STOP

8a Door Six: what if the power dies?

Door six led outside to the power yard: transformers, thick cables, a row of silent generators, turbines on the hill.

What happens if the grid blinks?

A hall of batteries glowed softly, waiting. *"They only need to last seconds. Just long enough."*

Seconds? That's ALL?

"Grid, battery, generator. A relay race. The baton is your video call — and it never touches the ground."

Three runners, one baton!

Then they pulled the big red practice switch on purpose. The lights flickered once. Everything held.

You break it ON PURPOSE?

Better on a Tuesday than by surprise.

★ WORTH REMEMBERING

The real engineering here isn't preventing failure — that's impossible. It's **surviving failure without anyone noticing**. Practise the disaster, on a calm day, over and over, until boring is the highest achievement. ⚡

📱 SIRI'S SECRET NOTEBOOK • DOOR 6 UNLOCKED

Grid → batteries (seconds) → generators. Practice the disaster deliberately. Nobody claps when nothing happens — and nothing happening is the whole JOB. 🟢

MANY MACHINES, ONE ANSWER

9a Door Seven: who does the thinking?

Door seven: one big machine drawn as an apartment block. Each tenant in a sealed room, unable to peek next door.

"And the hall grows. Need a thousand machines for an hour? Take them. Done? Give them back."

One machine, many strangers, no peeking!

The seats FOLD AWAY again!

★ WORTH REMEMBERING

Sharing one huge machine safely between strangers is the whole invention. Each customer gets a sealed slice that behaves like a private computer — and the empty slices go to somebody else instead of sitting idle. ⚡

"Some problems suit one genius. Others suit ten thousand helpers doing easy sums at the same instant."

At the hall's heart, thousands of racks worked one shared task, their threads of light converging into a single pulse.

So you hire the CROWD!

This is how machines LEARN, isn't it?

★ WORTH REMEMBERING

Modern AI is built on that crowd: chips that do enormous numbers of simple sums in parallel, fed mountains of examples. Not a brain in a jar — **arithmetic, at a scale no human hand could ever manage.** 🧠

📖 SIRI'S SECRET NOTEBOOK · DOOR 7 UNLOCKED

One machine → sealed slices → rent by the hour. And for learning: one crowd of tiny helpers beats one genius. All seven doors OPEN! But Kira says the last question isn't HOW. It's WHO. And WHY. 📖

THE PEOPLE WHO NEVER SLEEP

3am. A quiet room. A wall of gentle maps. Somebody is always awake so nobody else has to notice.

So **THIS** is what 'it just works' looks like.

At the door: a badge, an airlock, one person at a time, cameras watching like polite owls.

Why so strict?

Because somebody's whole life is inside.

At the dock, fresh servers came in on pallets while retired ones rolled out the other door. Every day.

Machines have **LIFESPANS**. About five years.

The splicer. The cooling tech. The guard. The night watcher. The battery engineer. The driver. Each said the same shy sentence.

'I only do my small part.'

★ WORTH REMEMBERING

Sit with that: **nobody on Earth knows how to build a cloud**. Each person masters one sliver — and one company conducts thousands of slivers into a single invisible machine. The conducting is the real invention. 🎵

📖 SIRI'S SECRET NOTEBOOK

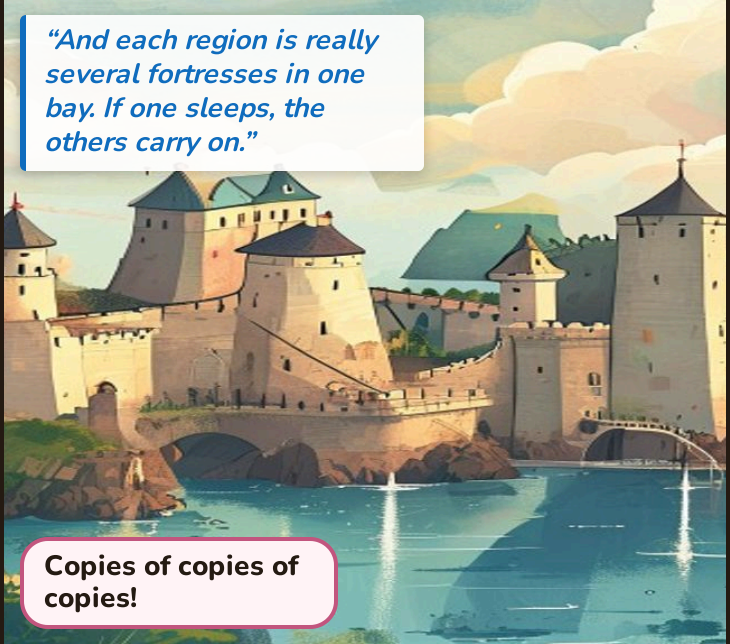
Night shift. Airlocks. Servers born and retired every single day. Nobody knows the whole recipe. So the real question: WHO'S THE CONDUCTOR? ...I think I'm about to find out.

THE WEB AROUND THE WORLD



Kira spread the world map. Glowing points on every continent, joined by arcs across the oceans.

One building? Try dozens of regions.



"And each region is really several fortresses in one bay. If one sleeps, the others carry on."

Copies of copies of copies!



"For a film, we don't fetch from far away. We keep it in a little cabinet on your street."

Near beats far. Every time.



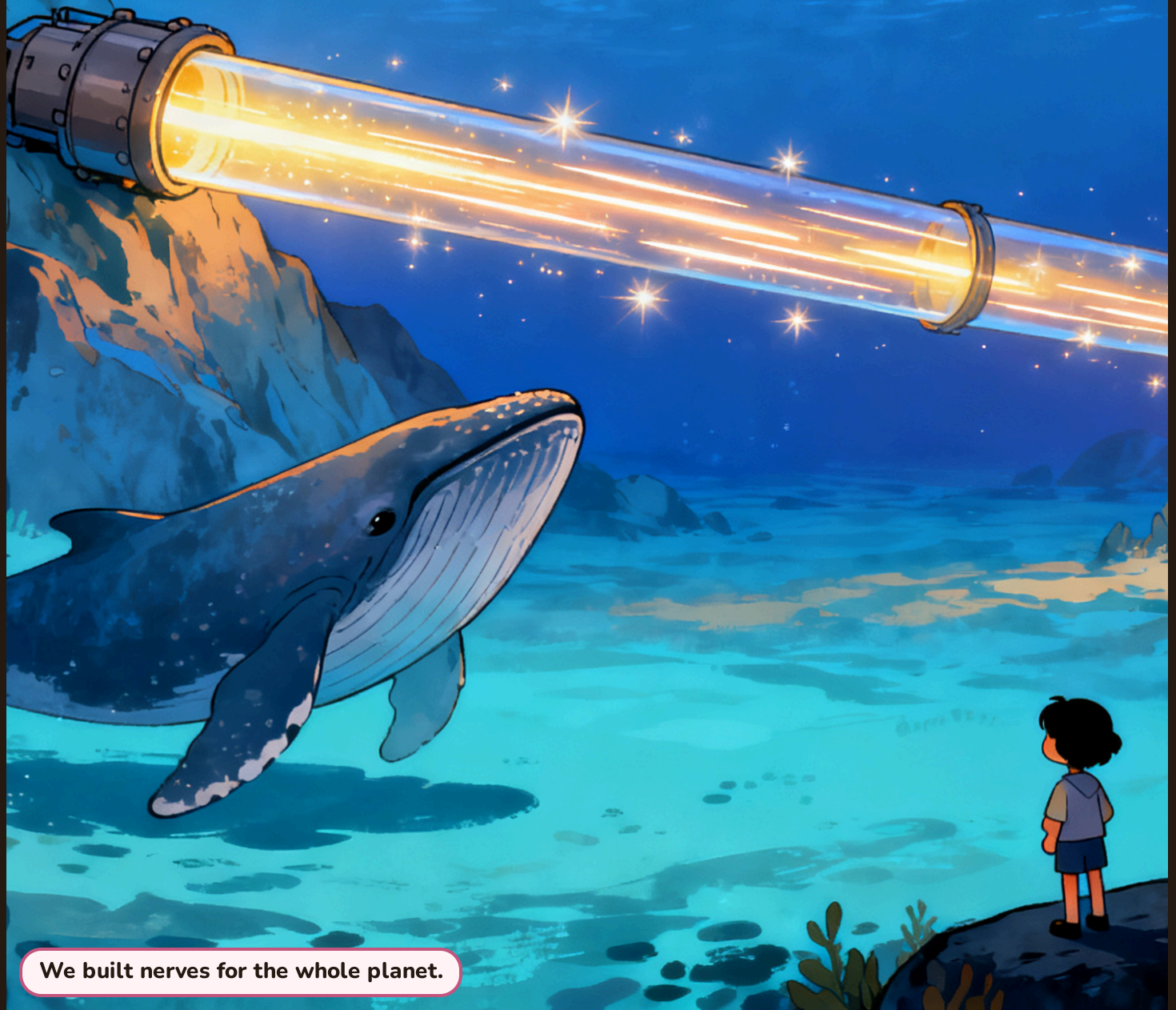
Siri raced a pulse of light down the corridor and lost by roughly the whole corridor.

Nothing goes faster. Nothing ever will.

★ WORTH REMEMBERING

Light is fast but not infinite: a round trip across the Atlantic takes about a tenth of the blink of an eye, and physics won't budge. So the answer isn't faster light — it's **keeping things closer to you.** 🌍

And under it all, the cables sleep on the sea floor, carrying continents' worth of conversation past the whales.



We built nerves for the whole planet.



SIRI'S SECRET NOTEBOOK

Dozens of regions 🌍 · fortresses in threes · films kept on my own street ·
light itself is the speed limit. Seven doors down. Now... someone wants to
meet me. 💰

WHY ANYONE WOULD RENT A MACHINE

12a Siri's question flips

"Before all this, every business bought its own computers. Guess your busiest day wrong and you'd waste a fortune."



A baker took exactly one van from a fleet garage of hundreds. Used it. Brought it back by lunchtime.



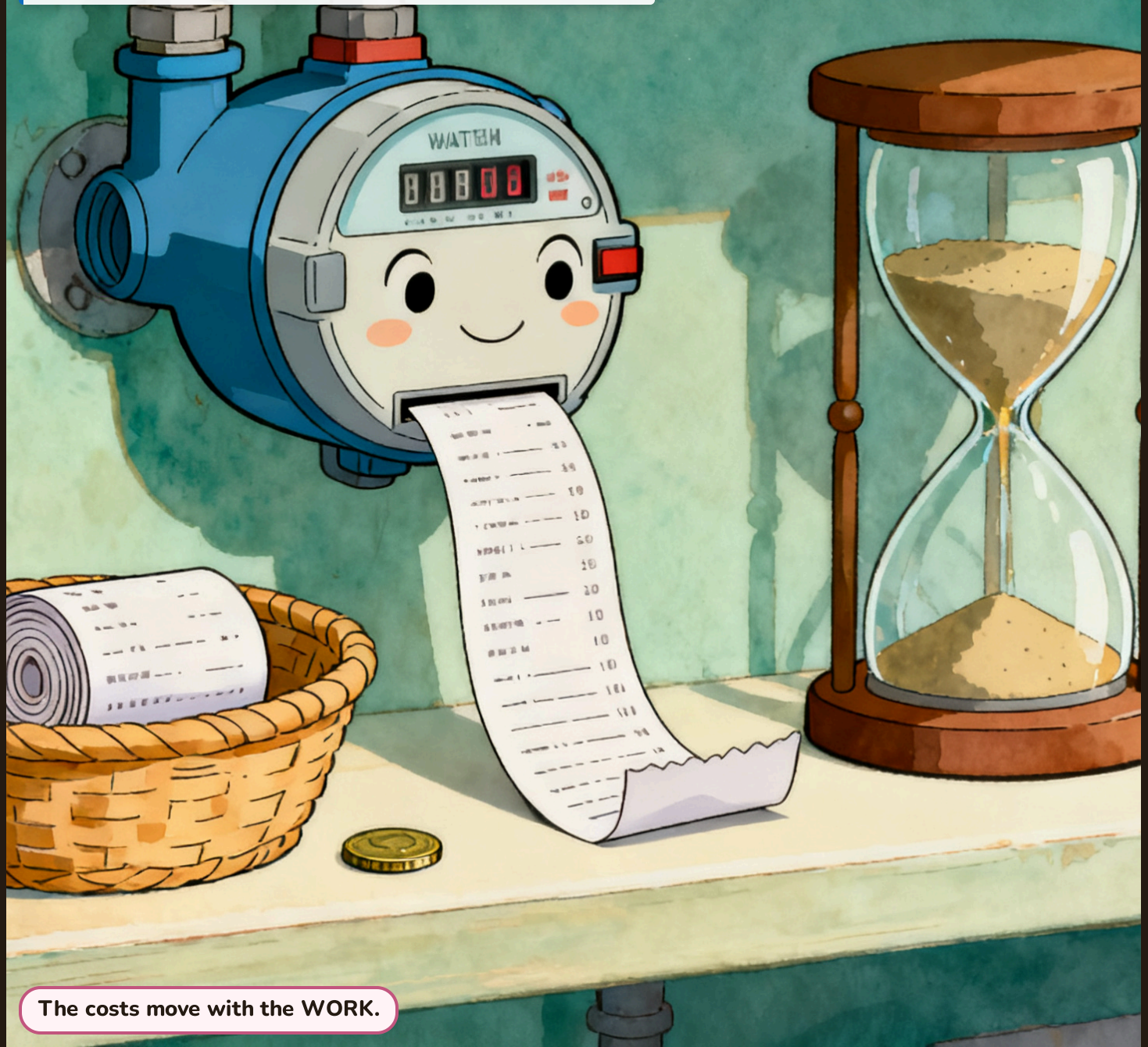
"Need a thousand machines for one hour? Take them. Done? Give them back to somebody else."



★ WORTH REMEMBERING

This is **elasticity**, and it changed who gets to build things. A hospital, a school, or a kid with an idea can borrow a supercomputer for one afternoon — and pay only for the afternoon. ⚡

At the end of the month: one bill, counted in minutes and gigabytes. No building. No electricians.



The costs move with the WORK.



SIRI'S SECRET NOTEBOOK

My question flipped: not 'how does it work' → 'WHY spend billions on windowless warehouses?' Answer #1: because renting beats buying whenever your needs wobble. And needs always wobble.

THE PRICE OF TRUST

Through a window: a hospital where every record, scan and appointment lived somewhere far away.

They trust a **BUILDING** they've never seen?

"So we sell something duller than cleverness," said Kira. "We sell: it will be there, and it will be safe."

Boring is the whole product!

A ledger showing exactly who opened what, and when. Locked doors, and a list of every key.

Trust isn't a feeling. It's a **RECORD**.

On the wall, a framed report of a bad day years ago — kept on purpose, so nobody could quietly forget it.

You **FRAME** your mistakes?

We'd rather remember than repeat.

★ WORTH REMEMBERING

Businesses buy reliability before they buy brilliance. Trust of that kind can't be bought quickly at any price — it is earned, one boring uneventful year at a time, and can be dented in a single bad week. 🙏

📖 SIRI'S SECRET NOTEBOOK

Answer #2: TRUST. Hospitals, banks, schools. They don't want dazzling — they want dependable. Trust takes decades to build, one week to dent. Framing your own mistakes = brave. 🙏

THE BUILDERS' BRIDGE

Somewhere, a student finished a small app after school. By morning, strangers in forty countries were using it.

She never bought ONE computer!

"And we don't just rent machines. We rent ready-made tools: a database, a map, a translator, a memory."

Lego bricks for grown-up builders!

"Every builder who learns these tools brings customers. Every customer brings more builders."

The bridge grows as people cross it!

"It's a garden party. Every guest makes it better. Better party, more guests, better musicians..."

The product isn't the warehouse. It's the PARTY!

★ WORTH REMEMBERING

Network effects, plus something quieter: millions of people already know these tools by heart. A rival can copy a warehouse. Copying the habits of millions of builders takes a generation. 🏰

📖 SIRI'S SECRET NOTEBOOK

Answer #3: THE BRIDGE. Rent machines → rent tools → builders learn them → builders bring customers → round and round. A student's bedroom becomes a worldwide shop overnight.

THE MOUNTAIN OF MONEY

"Now the unglamorous wall," said Kira. "Buying a million machines at once makes each one far cheaper."

A chart of costs sliding gently downhill, year after year, as the halls got bigger and the tricks got better.

Bigger, then cheaper, then bigger again.

"And at this size it pays to design your own chips, your own racks, even your own cooling."

Nobody can out-shop you!

You BUILD the tools that build the tools!

★ WORTH REMEMBERING

Building and filling data centers costs tens of billions of dollars a year. That number is itself a wall: only a handful of companies on Earth can even enter the race, let alone stay in it. 🏗️

"And almost every dollar earned goes straight back into more halls, more chips, more cables."



They keep planting the whole harvest.

 SIRI'S SECRET NOTEBOOK

Answer #4: SCALE. Buy a million → each is cheap → design your own everything → costs slide downhill. The entry ticket is tens of BILLIONS a year. Now — WHO owns this? Compass is spinning 🧭

THE COMPANY THAT SOLD INSTRUCTIONS

The compass dragged them through wet evergreens — to a campus of glass. Siri knew the four-square window on the gate.



MICROSOFT! The invisible machine is theirs!

"1975. Two school friends, Bill Gates and Paul Allen, in a rented room, writing software for a hobby computer."

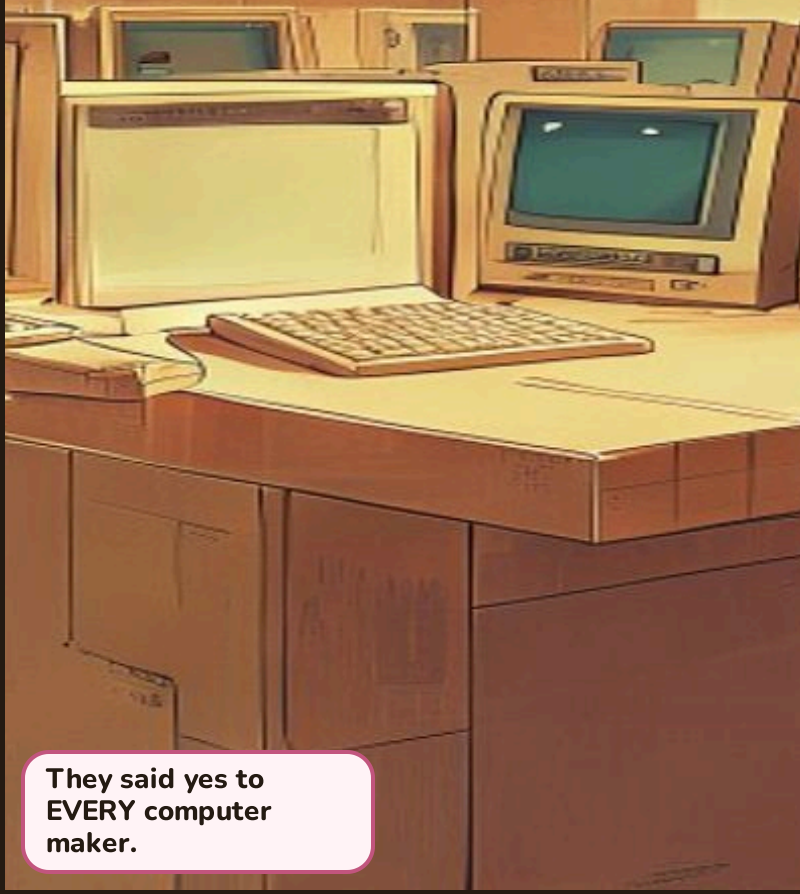


Software? Not the machine itself?

★ WORTH REMEMBERING

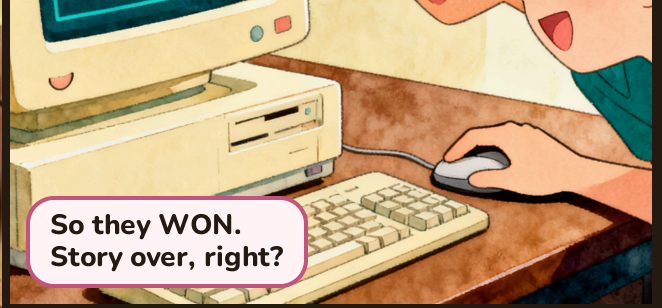
Their strange first bet: sell the **instructions**, not the hardware. Copying a machine costs another machine. Copying instructions costs almost nothing — so one good idea can reach a hundred million desks. 💾

"In 1981 their operating system shipped with IBM's personal computer — and they kept the right to sell it to everyone else too."



They said yes to EVERY computer maker.

"1985: Windows gave the machine a friendly face. By the 1990s, Office ran the world's paperwork."



So they WON.
Story over, right?

"Not quite. The internet arrived, and later phones — and for a while the giant looked slow and heavy."



The winner started LOSING?

★ WORTH REMEMBERING

Freeze here: **no castle is safe by birthright**. Around 2000 Microsoft had money, brilliance and millions of customers — and also a long antitrust fight, a missed phone era, and a reputation for fighting everyone. What happened next is one of business's great turnarounds.

📖 SIRI'S SECRET NOTEBOOK · THE REVEAL

MICROSOFT. Rented room 1975 → sell INSTRUCTIONS → shipped with IBM's PC → Windows + Office everywhere → then missed the internet's next wave and the phone entirely. I actually gasped. What saved it?! TURN THE PAGE.

THE TURNING OF THE SHIP

2014. A new leader who had spent years quietly building the cloud business took the wheel.



Turn the ship. Even if it hurts.

The old business sold boxes once. The new one would run machines forever — and compete with the boxes.



They chose to eat their OWN lunch.

★ WORTH REMEMBERING

The bravest move a big company can make: bet on the thing that **threatens your best product**. Sell it as a service and the money arrives slowly instead of all at once — painful for years, sturdier forever. 🚢

Then the surprise: the company that once fought outsiders started welcoming rivals' software onto its own machines.

In 2018 it bought the place where the world's programmers keep their code — and left it open to everyone.

Take care of the builders first.

And when machines that learn arrived, the halls of racks were already built, waiting.

Wait, you invite your **COMPETITORS** in?

Customers already use everything. So must we.

The warehouse became a **BRAIN FACTORY**.



THE STORY IN TIME

1975

Two school friends start a software company for hobby computers.

1981

MS-DOS ships with IBM's personal computer — and with everyone else's too.

1985

Windows: the machine gets a friendly face of rectangles and an arrow.

1990

Office bundles the tools every workplace needs.

1995

The internet arrives. The giant scrambles to catch up.

1998

A long antitrust fight begins. Years of courtrooms follow.

2001

Xbox: the company learns to build hardware people love.

2008

Azure announced. 2010: it opens for business.

2014

New leadership turns the ship: cloud first, rivals welcome.

2016

LinkedIn joins. 2018: GitHub, home of the world's code.

2019

A deep partnership with an AI lab. The racks are already built.

Today

One of the largest cloud businesses on Earth. ☁



SIRI'S SECRET NOTEBOOK

Sell instructions → Windows everywhere → miss the internet AND phones → 2014: turn the ship, cloud first, invite the rivals in, buy the builders' home. Out-competed their own best product. 

THE CASTLE WITH NO DOORS

A warm glow. A whiff of cherry cola. Warren and Charlie, the partners from Omaha, before a shining castle.

Under a dripping evergreen, the two old friends let her lay out the walls, one by one. Nodding. Chuckling. Correcting.

The only question that matters for a hundred years: what keeps invaders OUT?

Walls! I've been collecting them ALL BOOK!

Scarier than any school quiz. A hundred times more fun.



THE CASTLE WALLS • WHY RIVALS CAN'T COPY IT



Wall One: The Mountain of Money

Building and filling data centers costs tens of billions a year. Very few companies can even enter the race. That price is itself a wall.



Wall Two: Where the Work Lives

Once a hospital's records or a bank's systems run here, moving them takes years and risks everything. Nobody moves for fun. (Grown-ups say: switching costs.)



Wall Three: The Boring Promise

Customers buy reliability and safety before cleverness. Decades of uneventful years are not something money can buy quickly.



Wall Four: The Builders' Bridge

Millions of developers already know these tools by heart, and the office software sits on the same desks. More tools pull customers; more customers pull tools.

Charlie tapped his thick glasses. *"Turn the telescope around. Don't ask how it wins — ask what would DESTROY it. Then check they're not doing it. Invert, always invert."*



Find every way to LOSE... then don't go there!



THE CASTLE WALLS • WHY RIVALS CAN'T COPY IT



Crack One: Two Giant Rivals

Two other enormous companies want exactly these customers. Nobody here gets to relax, ever.



Crack Two: The Rule-Makers

Governments watch closely whether bundling and pricing are fair. This company has lost that argument before.



Crack Three: Chips and Power

The best chips are scarce and the electricity is scarcer. You cannot rent a power station overnight.



Crack Four: One Bad Week

A serious security failure could dent a promise built across decades. The wall made of trust is also the thinnest.



★ WORTH REMEMBERING

Charlie's ruin-the-cloud checklist: break the promise once, badly. Treat locked-in customers as prisoners. Skimp on security to save a penny. Guard the old product and miss the next wave. Now — **just never do those.** Inversion turns worry into a checklist.

Warren raised his cola. *"I like businesses whose customers can't easily leave and don't want to. Then I ask whether the owners reinvest wisely."*



The treasure was never the software!

SIRI'S SECRET NOTEBOOK · THE CASTLE

WALLS: mountain of money 🏰 work lives here 🔗 boring promise 🤝
builders' bridge 🌉. CRACKS: two rivals ⚔️ rule-makers ⚖️ chips and power
🔌 one bad week 🛡️. Charlie: INVERT. 🏰

THE JUDGE'S QUESTIONS

Warren built a tiny courtroom under the evergreens — and put a SERVER on the witness stand. *“Every business answers a judge someday. The judge is the future. Today, that's you.”*

TOK TOK



Order in the court!

Siri banded the tiny gavel and fired Warren's five eternal questions.



Question one, witness: will people still NEED you in thirty years?



★ WORTH REMEMBERING

The Owner's Court:  Enduring need? —

'Storing, sharing, computing. Older than paper.'

 Trust earned? — 'Hospitals and banks sleep

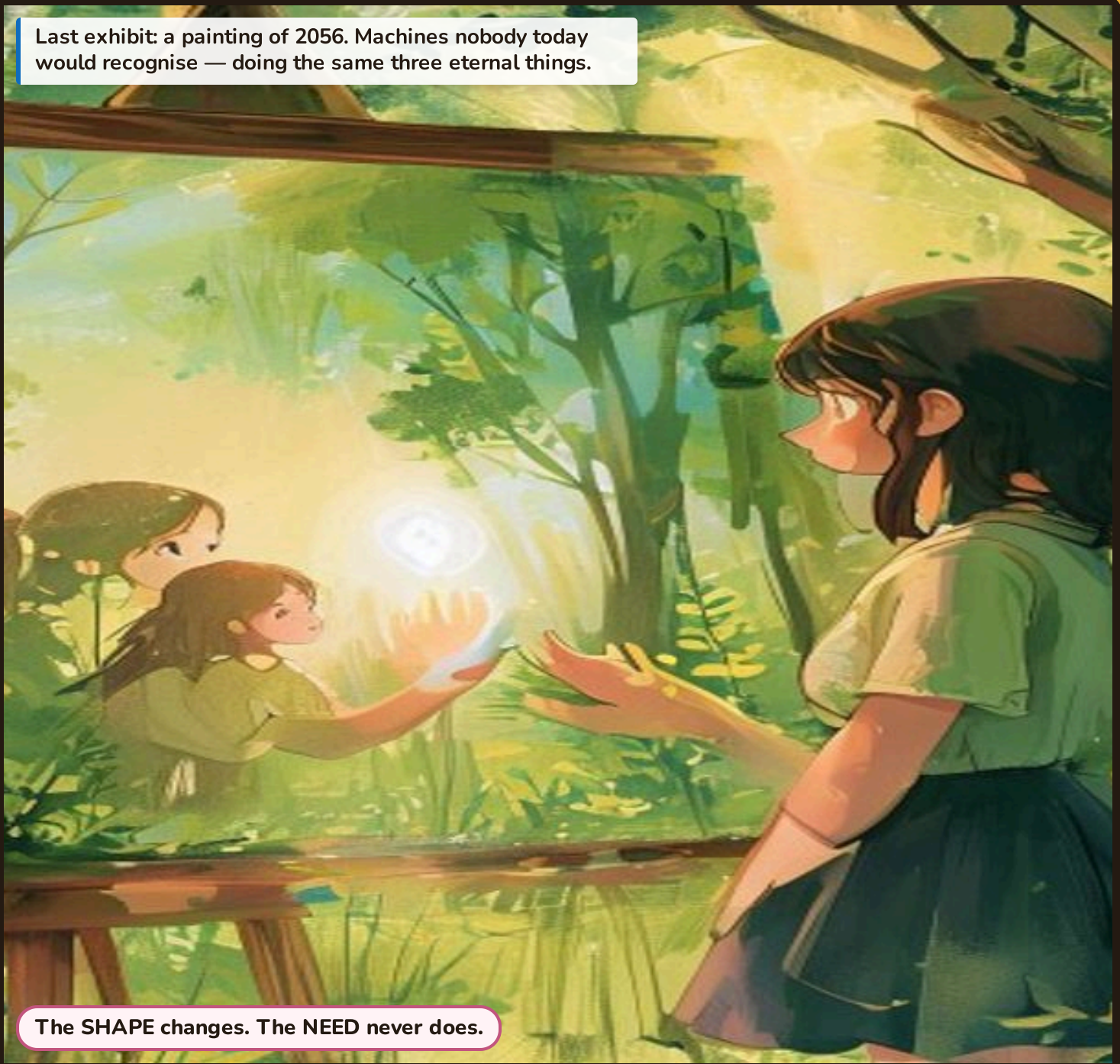
on me.'  Reinvesting wisely? — 'Almost every dollar goes back into halls, chips and cables.' 

Copyable with money? — 'The warehouse, in years. The habits of millions of builders? Not

with money alone.'  What breaks you? —

'One careless week, or falling asleep during the next wave.' Court adjourned for lemonade.

Last exhibit: a painting of 2056. Machines nobody today would recognise — doing the same three eternal things.



The SHAPE changes. The NEED never does.

 SIRI'S SECRET NOTEBOOK • JUDGE ANY BUSINESS

Warren's five: ① enduring need? ② trust earned? ③ reinvests wisely? ④ copyable with mere money? ⑤ what breaks it? Works on soap, railways, warehouses full of computers — anything. (He never once mentioned a stock price. The judge judges the BUSINESS.) 

THE NEXT THIRTY YEARS

"The racks' newest job is already here: machines that learn, sitting beside people at work."



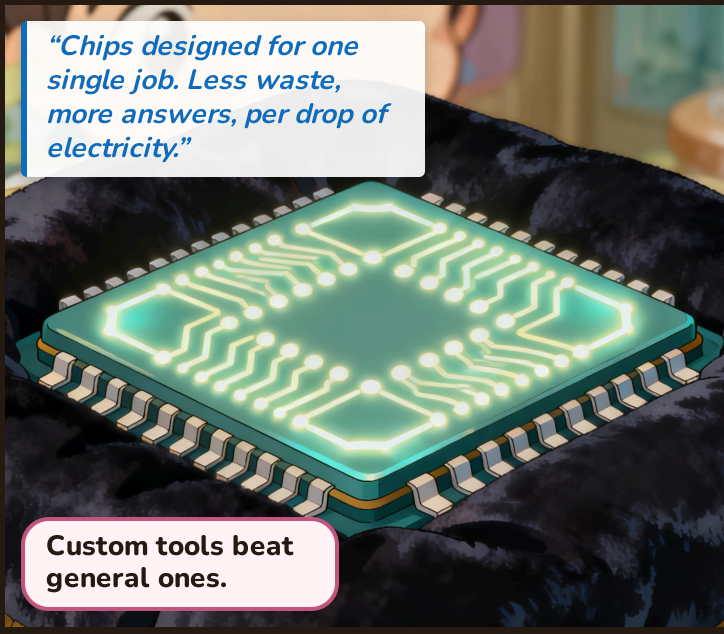
A patient helper
for every desk.

"And the quiet revolution: proteins folded, materials searched, storms forecast. Discovery, sped up."



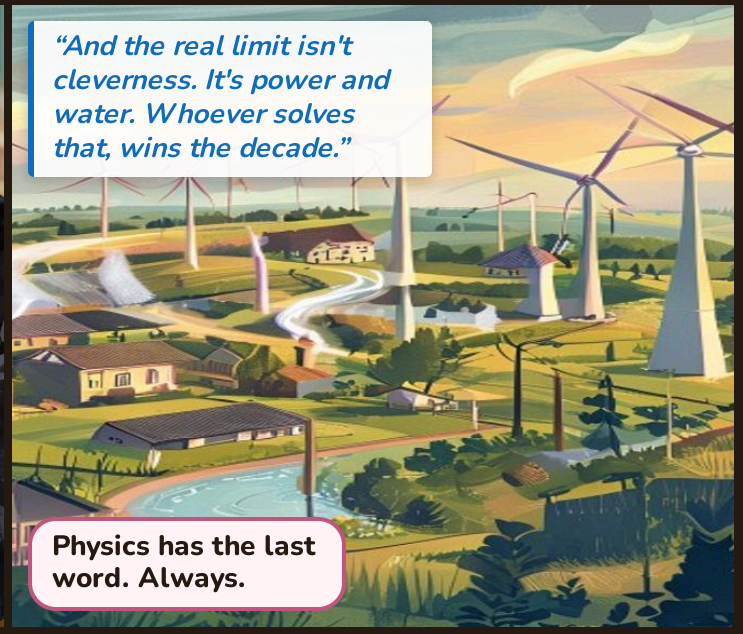
The warehouse
became a
LABORATORY!

"Chips designed for one single job. Less waste, more answers, per drop of electricity."



Custom tools beat
general ones.

"And the real limit isn't cleverness. It's power and water. Whoever solves that, wins the decade."



Physics has the last
word. Always.

★ WORTH REMEMBERING

No crystal balls — just visible currents: learning machines woven into ordinary work, chips built for one job, computing pushed closer to where you stand, and a hard race to make it all cleaner. Siri's rooftop rule: **don't bet on the building — bet on the needs.** 🌐

On a rooftop at dusk, she added the honest last line: this is a tool. Tools serve masters.



Best servant. Worst master. Same as fire.

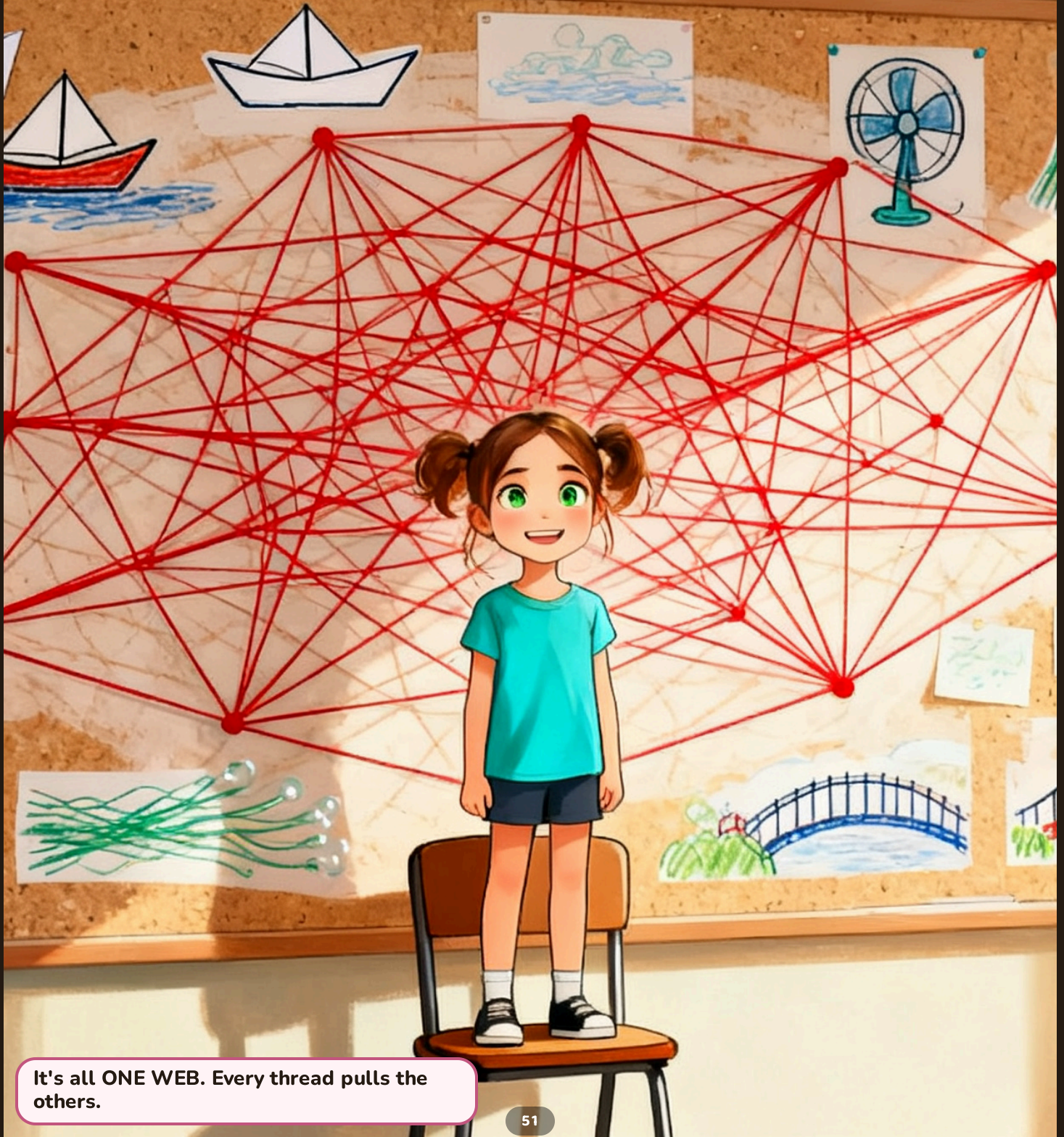


SIRI'S SECRET NOTEBOOK

2056 watchlist: learning machines everywhere, one-job chips, computing on my own street, greener power, discovery sped up. Rules: bet on needs, not buildings · trust is the crown 🌟

THE SECRET NOTEBOOK

Home stretch. Siri pinned every discovery to her wall and joined them with red string.



It's all ONE WEB. Every thread pulls the others.



★ WORTH REMEMBERING

The Science Web, one breath: a file becomes numbers → numbers become switches → switches are torn into parcels → parcels ride bouncing light through glass and under oceans → they rest on discs that never touch and jars of sparks, in three places → a building breathes cold air and never goes dark → sealed slices share one machine, and a crowd of tiny helpers learns. **Ordinary physics, stacked extraordinarily.**



★ WORTH REMEMBERING

The Business Web, one breath: rent beats buy (elasticity) → boring reliability becomes trust → tools bring builders and builders bring customers (the bridge) → buying a million machines makes each cheap (scale) → four walls, patrolled with Charlie's inversion and judged in Warren's court. And underneath: thousands of strangers, conducted into one invisible machine.

The true test: she retold the **WHOLE** thing to her little cousin. With a torch and three shoeboxes. He got it.



If you can't explain it with shoeboxes, you don't know it.



SIRI'S SECRET NOTEBOOK · THE LATTICEWORK

Charlie's word for my string-wall: a
LATTICEWORK of mental models. Twelve from
ONE word: meaning-is-agreement · no-central-
boss · assume-everything-breaks · practise-the-
disaster · near-beats-far · nobody-knows-the-
recipe · rent-vs-buy · switching costs · trust-
compounds · network effects · scale · replace-
yourself-first. 

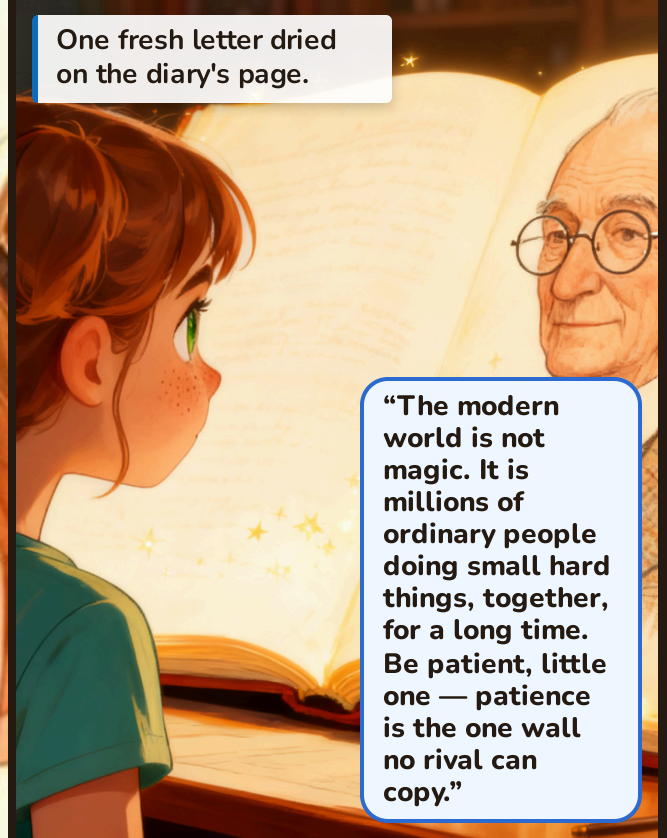
COMING HOME

Her own bed. Morning. The compass: quiet. The house: lit differently, somehow.



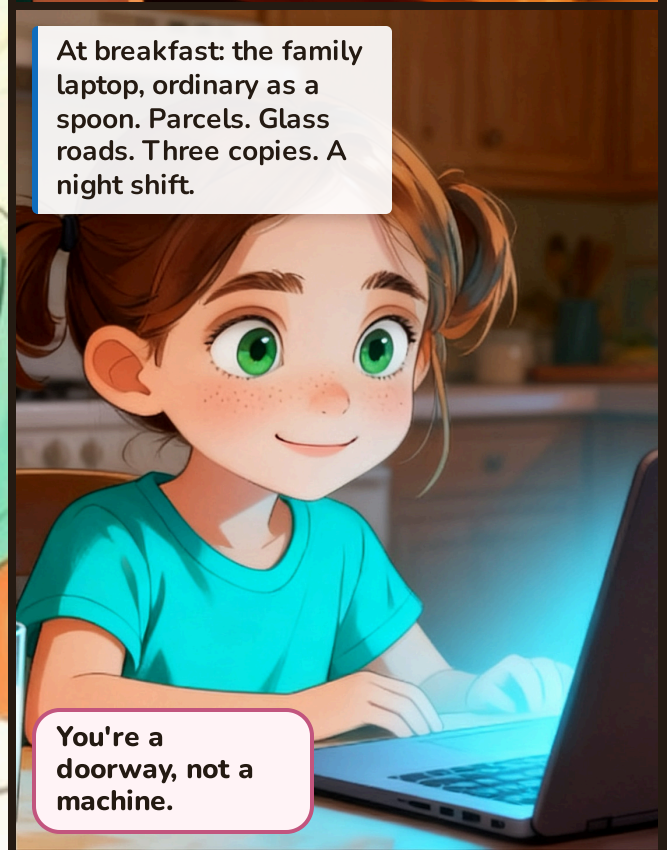
Was it real? It FELT real...

One fresh letter dried on the diary's page.



"The modern world is not magic. It is millions of ordinary people doing small hard things, together, for a long time. Be patient, little one — patience is the one wall no rival can copy."

At breakfast: the family laptop, ordinary as a spoon. Parcels. Glass roads. Three copies. A night shift.



You're a doorway, not a machine.

Then she closed the lid —
and the whole family
laughed at Grandma's old
story instead.



Best servant.
Worst master. MY
rules now.

She hugged the diary tight.
Somewhere far away, rain
fell on a campus of glass.



Show me the next
one, Grandpa. 🧡

★ WORTH REMEMBERING

Next unlock, feel it: your file torn into numbered parcels, riding bouncing light beneath an ocean, copied three times into a hall that breathes cold air and never goes dark, watched all night by someone you will never meet. **Nothing, from now on, is just anything.**

📖 SIRI'S SECRET NOTEBOOK · VOLUME CLOSED

Seven doors. Twelve mental models. One castle with no doors. One giant that nearly slept through the future — and woke up. But the compass is twitching toward a blank white box on a screen, waiting for a question... 🧭 🔍



OUR PHILOSOPHY

We believe the greatest gift we can give a child is the ability to think.

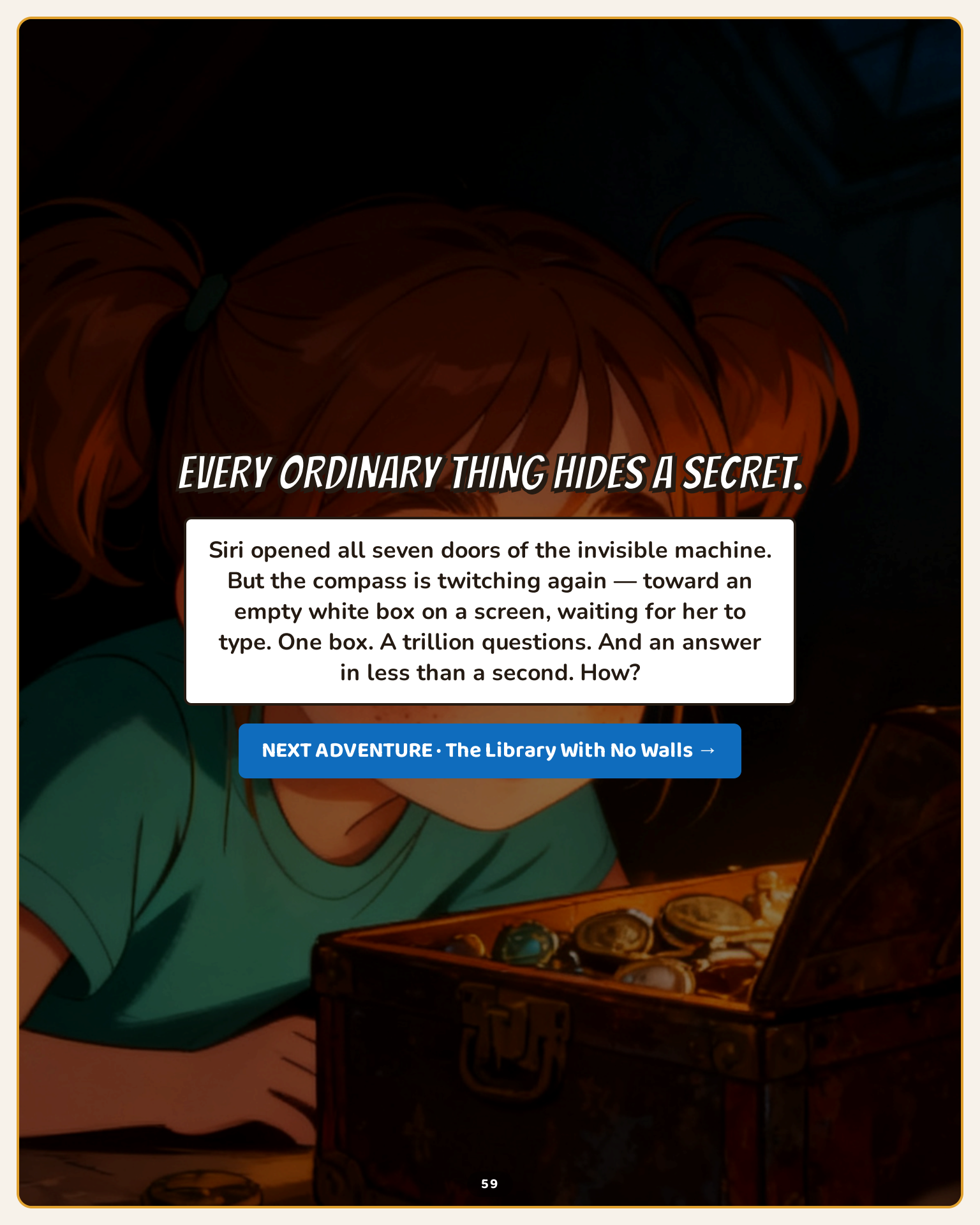
Inspired by the multidisciplinary thinking of [Charlie Munger](#) and the rational, long-term philosophy of [Warren Buffett](#), our comics connect science, technology, business, history, and human behavior to show how the real world works.

Every story begins with a scientific idea and follows its journey into innovation, industry, and the businesses that create value for society. Along the way, children learn that great companies are built on curiosity, experimentation, integrity, and long-term thinking.

Our goal is not to teach children how to invest, but to help them build the mental models needed to understand the world, ask better questions, and think independently.

The companies featured in *The Great Company Adventures* are educational case studies—not investment recommendations. They show how knowledge, innovation, and perseverance turn ideas into products, services, and enduring businesses.

LEARN THE SCIENCE. • UNDERSTAND THE BUSINESS. • THINK FOR LIFE.

A girl with red hair in pigtails, wearing a green shirt, is looking into an open treasure chest filled with gold coins and jewels. The scene is dimly lit, with a warm, golden glow emanating from the chest.

EVERY ORDINARY THING HIDES A SECRET.

Siri opened all seven doors of the invisible machine. But the compass is twitching again — toward an empty white box on a screen, waiting for her to type. One box. A trillion questions. And an answer in less than a second. How?

NEXT ADVENTURE • The Library With No Walls →