Generative AI:

Because Who Needs Human Ingenuity Anyway?

David Graham, Chief Innovation Officer + Co-chair Civic Innovation Harvard TECH

--- CLOSER THAN WE THINK!

by Rodelagh

ROBOT DRIVING

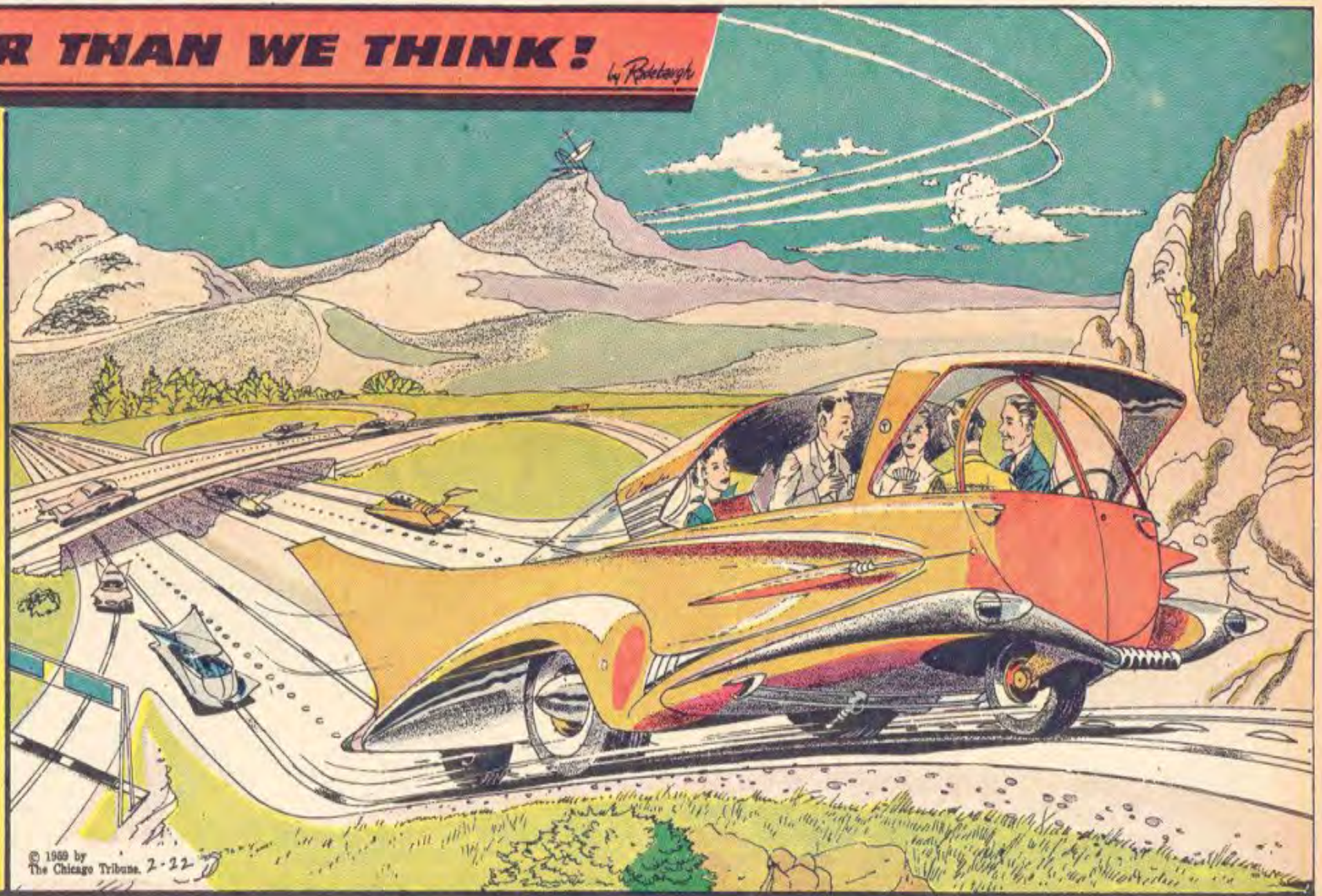
Plans have already been perfected for control devices that will make intercity driving completely automatic.

One system, devised by RCA's famous Vladimir Zworykin, has been tested on a Nebraska public highway. Buried cables and loops of wire radiate signals that guide a specially equipped car and dictate its speed. General Motors has demonstrated robot driving with this system.

Another type of design would employ a stainless steel strip in the center of a thruway traffic lane. You'd drive over it, then push a button to start a magnetic follower electronically governed by the strip. The car would thus guide itself; and sensing devices would prevent collisions fore and aft.

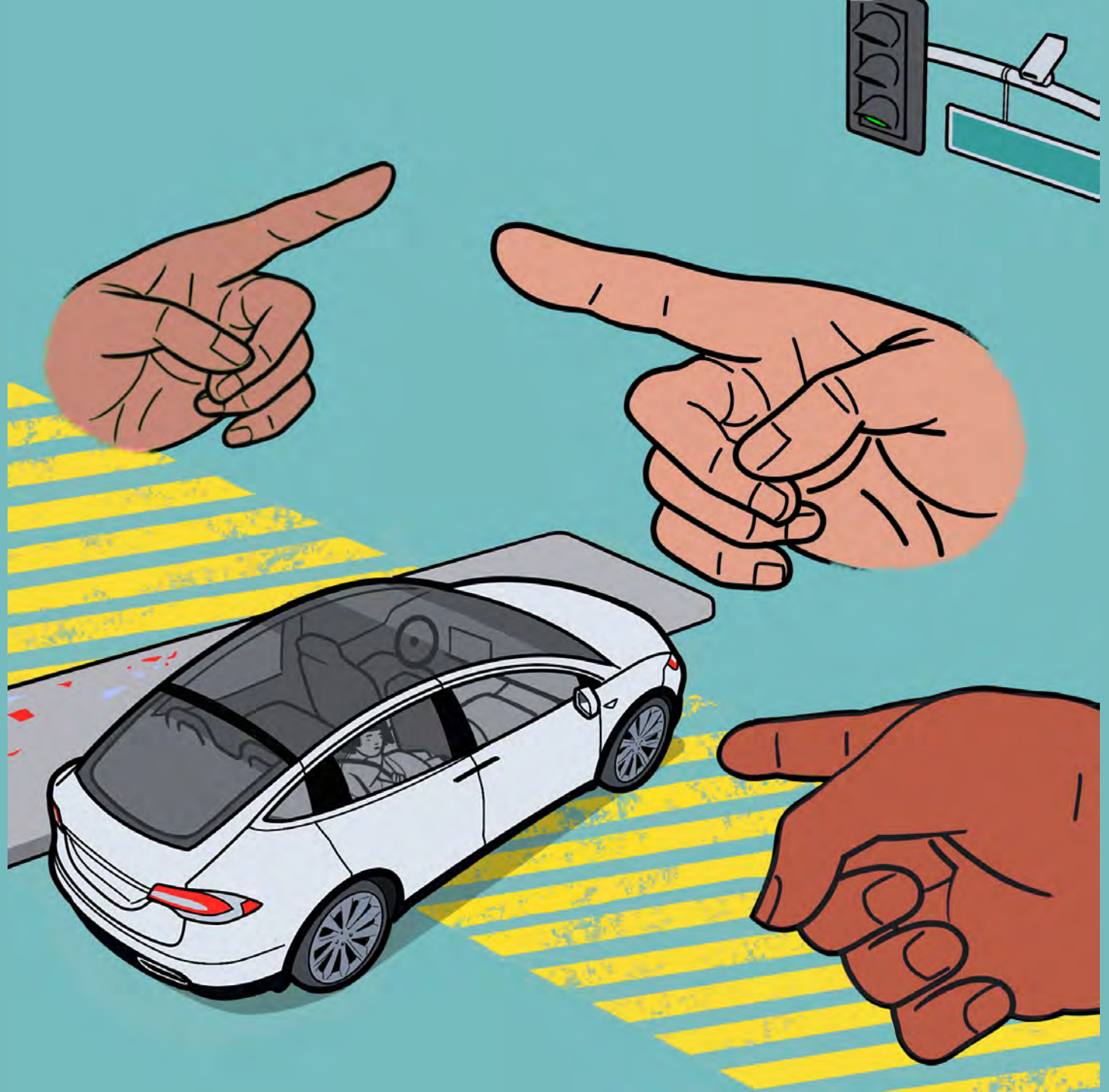
The day when we can play cards or take a nap while driving is closer than we think!

Next week:
Rejuvenated Downtowns



© 1959 by The Chicago Tribune. 2-22

BRITT MORENO
DANIEL MARIN
kxan



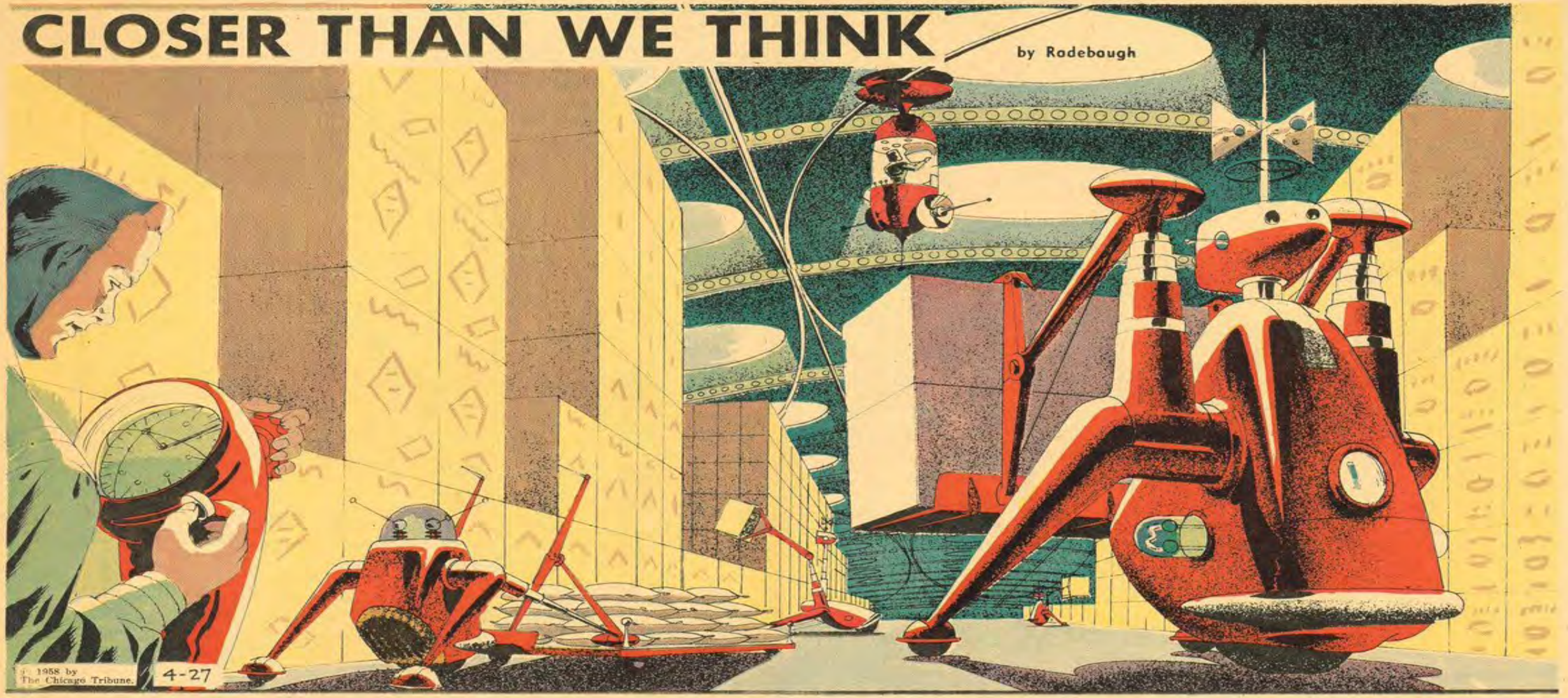
---- CLOSER THAN WE THINK ! ----

by Radbaugh

aptera

CLOSER THAN WE THINK

by Radebaugh



ROBOT WAREHOUSES Manpower shortages in the future may require mechanized handling of the necessities of life—food, clothing, building components and so on. As the population grows, the size of storage facilities will have to keep pace. Here is a robot warehouse of the future, operated by a corps of mechanical men controlled by a lone operator in a control cupola suspended from a ceiling monorail. Directed electrically, never tiring, a robot warehouseman would pursue his duties as energetically as the proverbial ant.

amazon
fulfillment

1B1
2B1
3B1
4B1
1A1
2A1
3A1
4A1
2178
KIVA Systems
1348
1348
1374
1375
1377

--- CLOSER THAN WE THINK!

by Richards

ONE-WORLD JOB MARKET

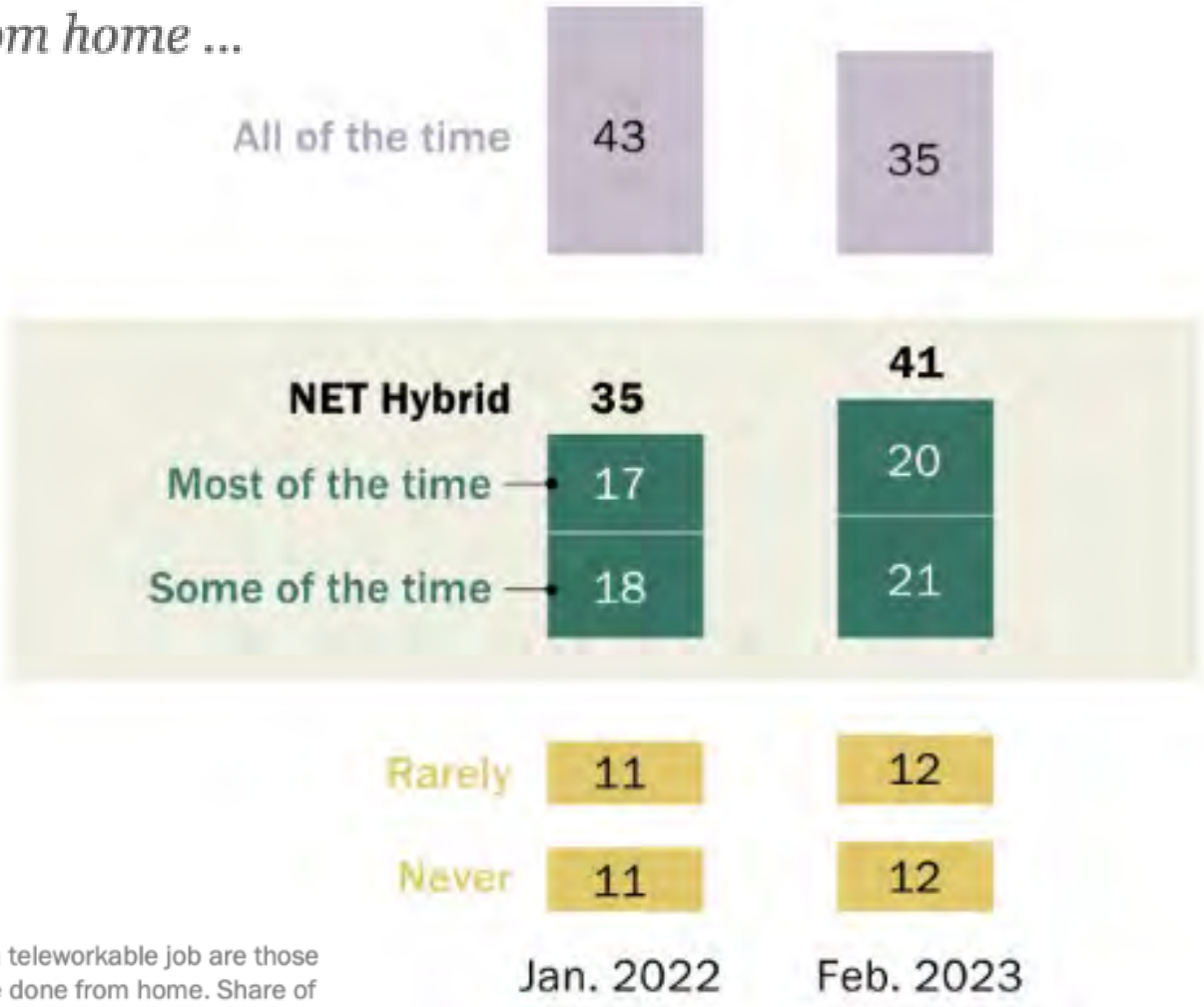
Until recently, a man limited his job hunting to his home town. Now he sometimes searches the country. Tomorrow's job markets – and opportunities – will be world-wide.

Television will make it possible for an employer in Buenos Aires to interview a job seeker in Philadelphia. New Yorker Felix Cuervo has already pioneered in this direction, interviewing applicants for Civil Aeronautics Administration positions over a 2-way closed circuit. Said Cuervo: "Dress, bearing, manner and ability can be gauged over television about as accurately as in personal interviews."

Next Week: Wall in the Sky

Growing share of U.S. workers are working a hybrid schedule

Among employed adults with a teleworkable job, % saying they are working from home ...



Note: Based on workers who are not self-employed. Adults with a teleworkable job are those who say, for the most part, the responsibilities of their job can be done from home. Share of respondents who didn't offer an answer not shown.
Source: Survey of U.S. workers conducted Feb. 6-12, 2023.

PEW RESEARCH CENTER

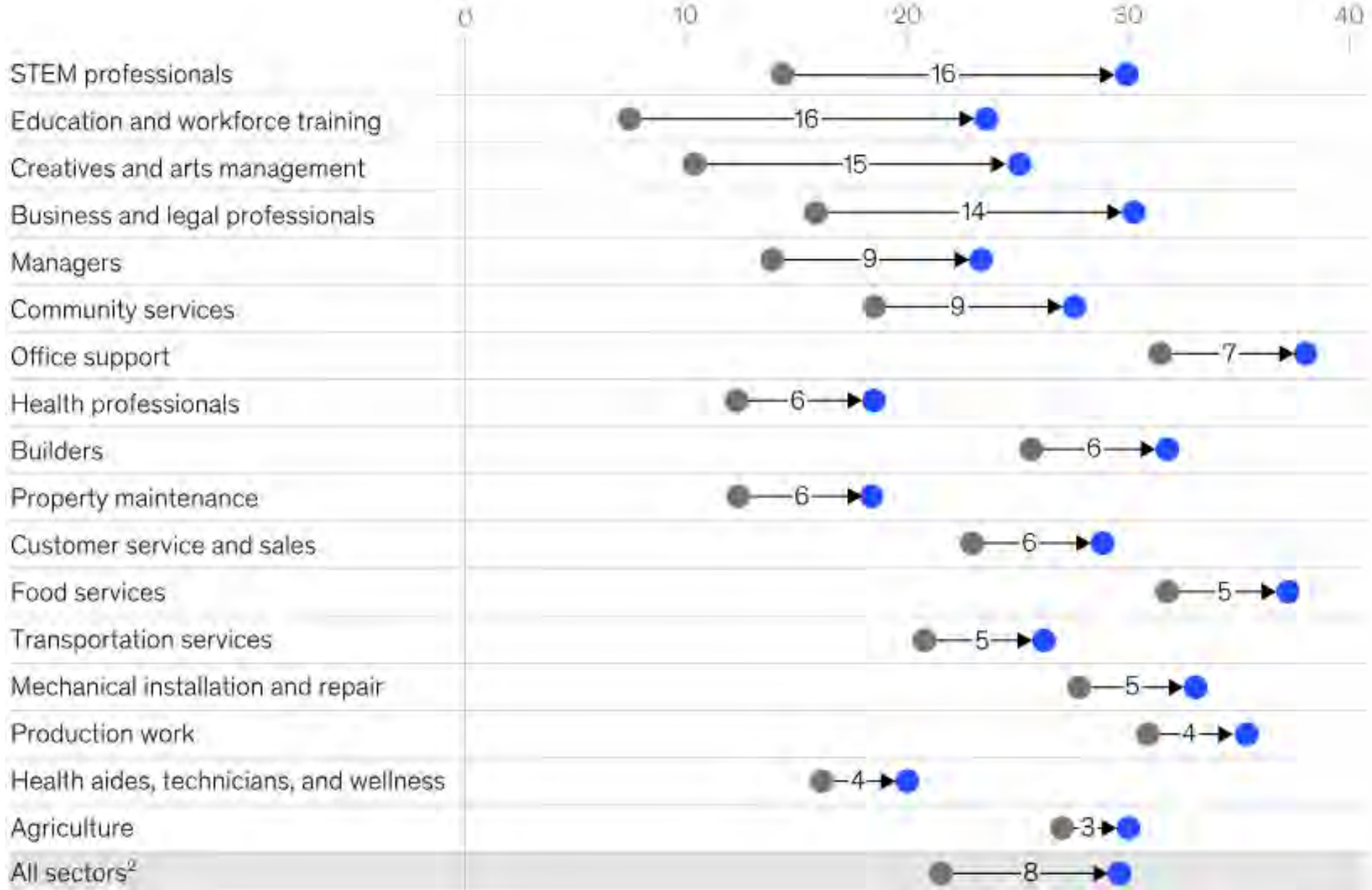
McKinsey Global Institute

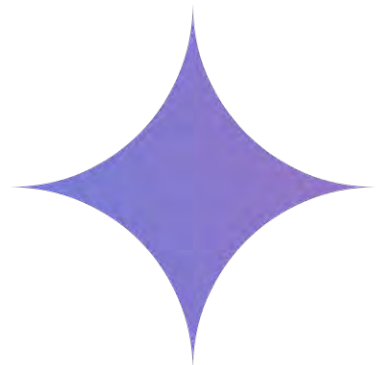
With generative AI added to the picture, 30 percent of hours worked today could be automated by 2030.

Midpoint automation adoption by 2030 as a share of time spent on work activities, US, %

- Automation adoption without generative AI acceleration
- Automation adoption with generative AI acceleration

XX — Percentage-point acceleration in automation adoption from generative AI

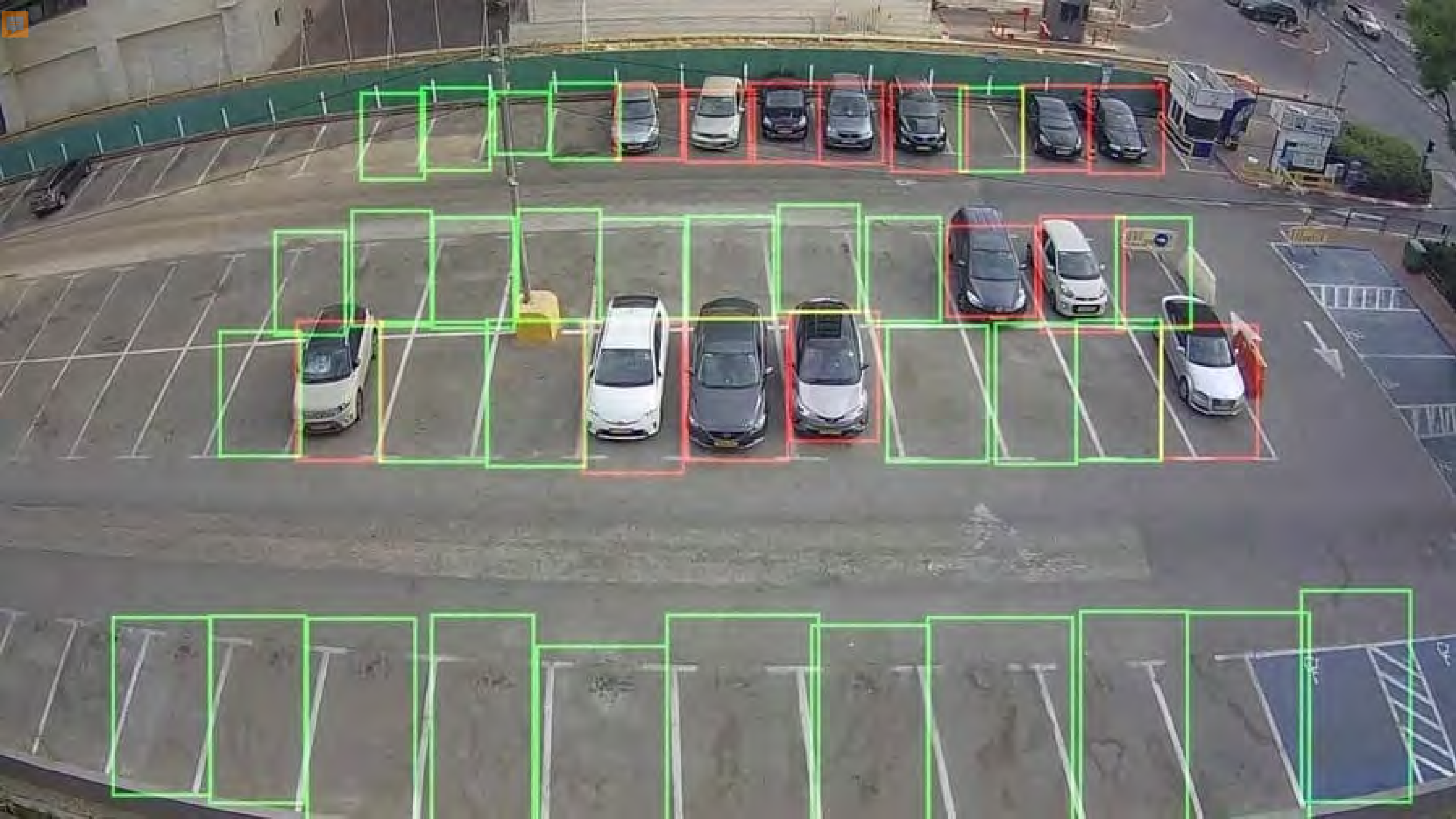




GOVTECH

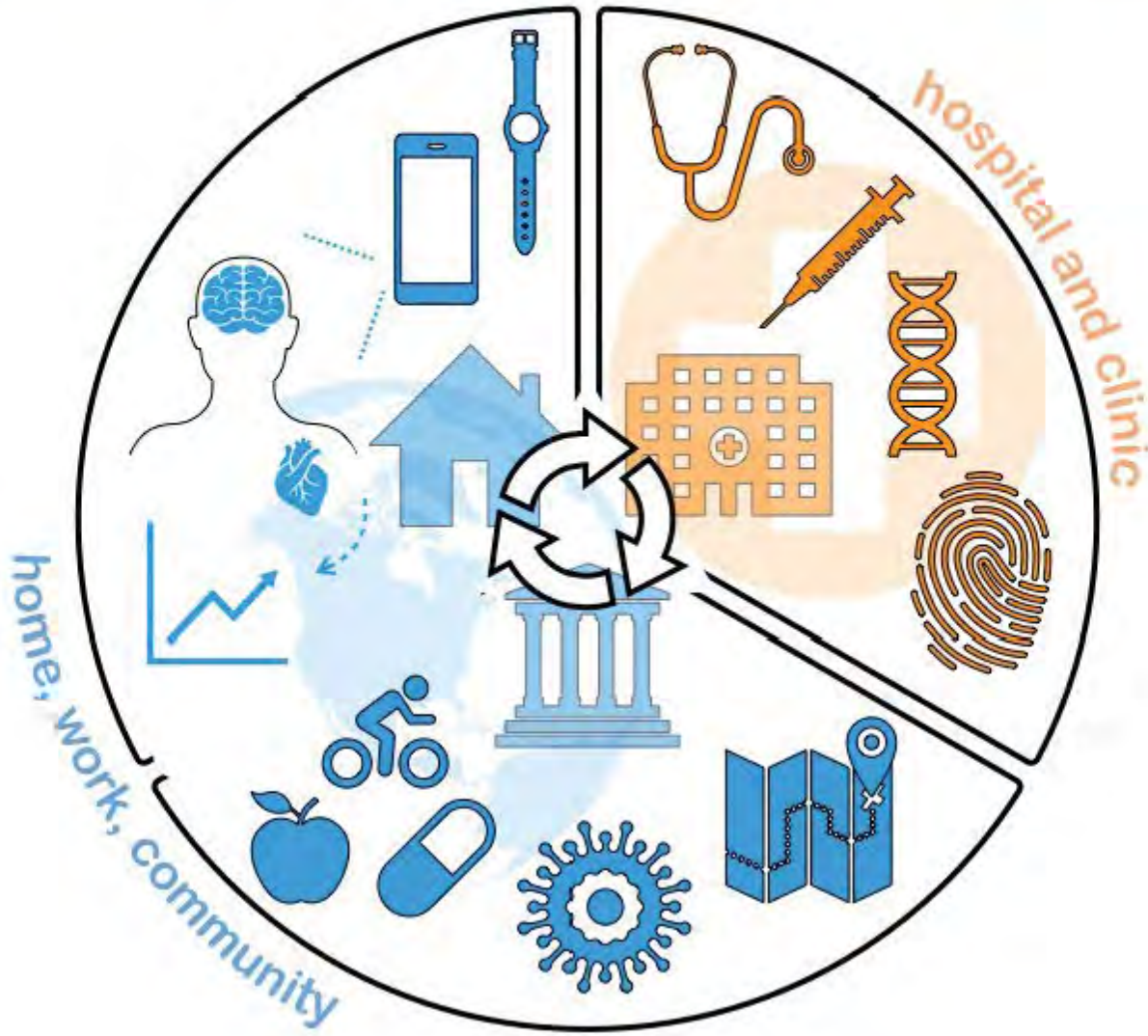
REVOLUTIONIZING ROAD SAFETY

HOW A.I. IS BEING USED ON LOCAL ROADS TO IMPROVE SAFETY

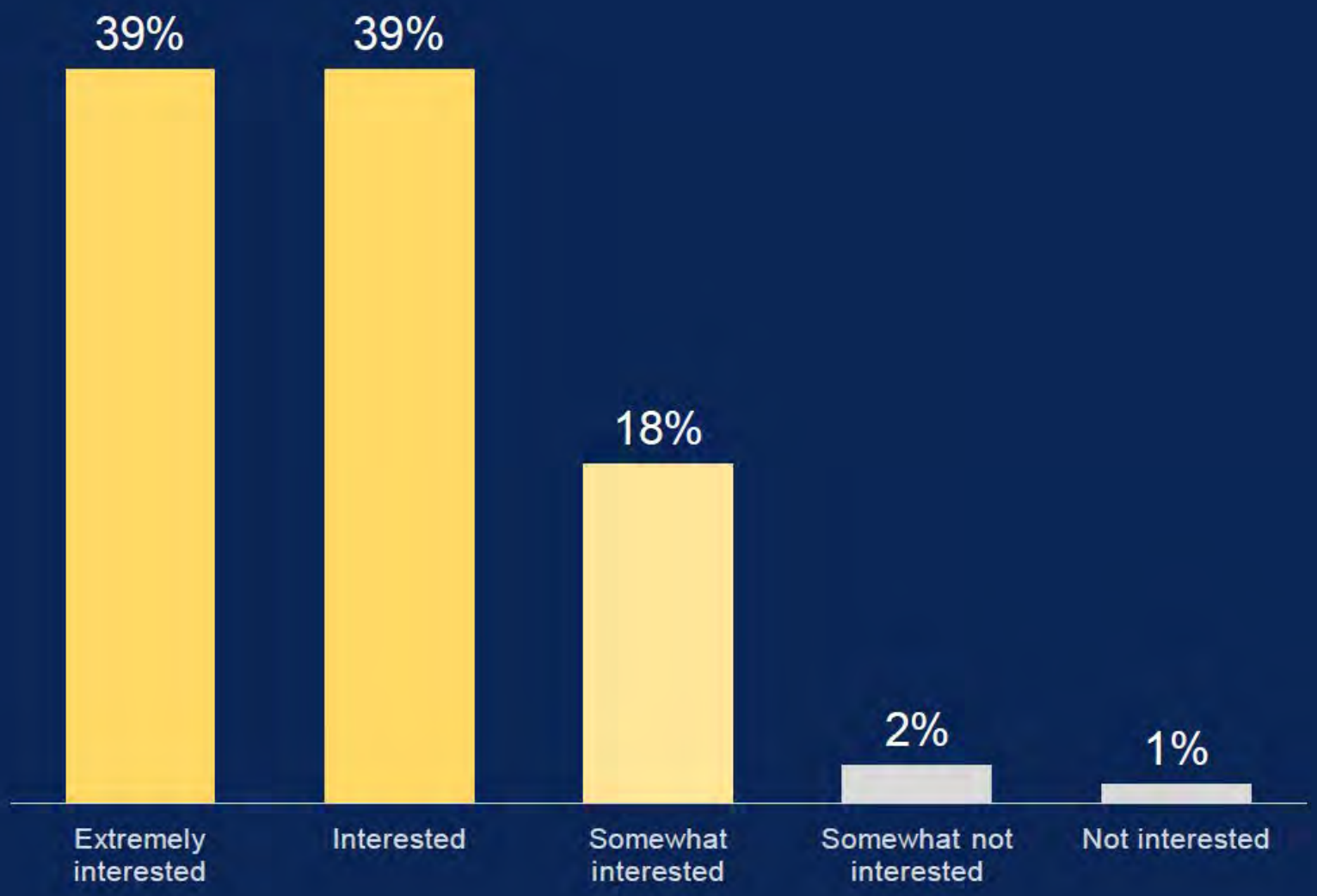


AI in HSOHC

Artificial Intelligence in Health Settings Outside the Hospital and Clinic



78% of Mayors said they are interested or extremely interested in using generative AI



> *(I am) interested in how AI might help us predict where house fires might occur, how we might lower healthcare claims, and predict street violence…*

Bloomberg Philanthropies

71% of cities are exploring, testing or implementing the use of generative AI, yet most cities have not developed their capabilities and policies

22%

cities have designated a generative AI lead[1]

13%

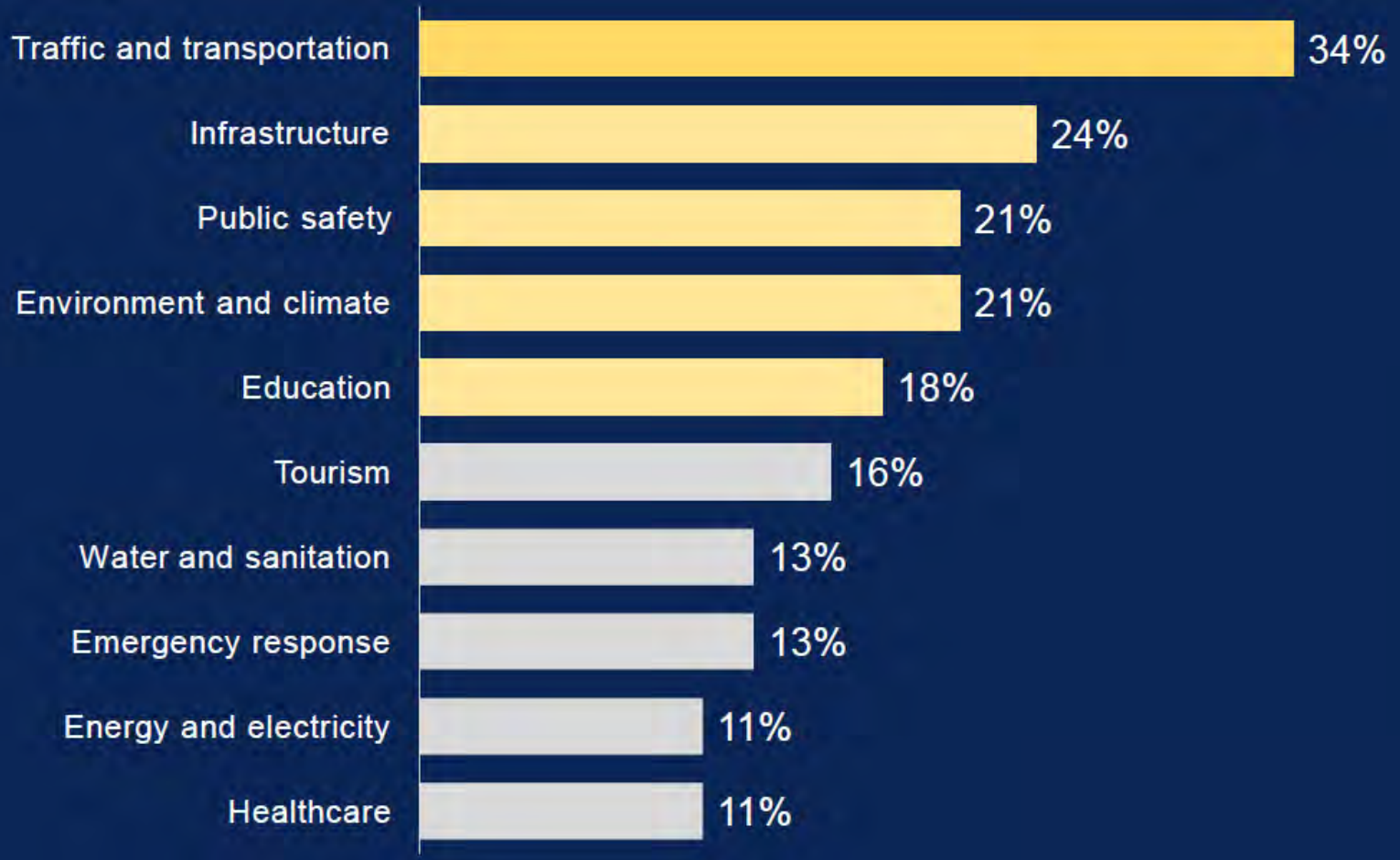
cities have set policies/ guidelines around generative AI use

11%

cities have provided training to their staff on generative AI[1]

Bloomberg Philanthropies

34% of cities reported being interested in leveraging generative AI for **traffic and transportation** followed by infrastructure, public safety, environment and climate, and education sectors



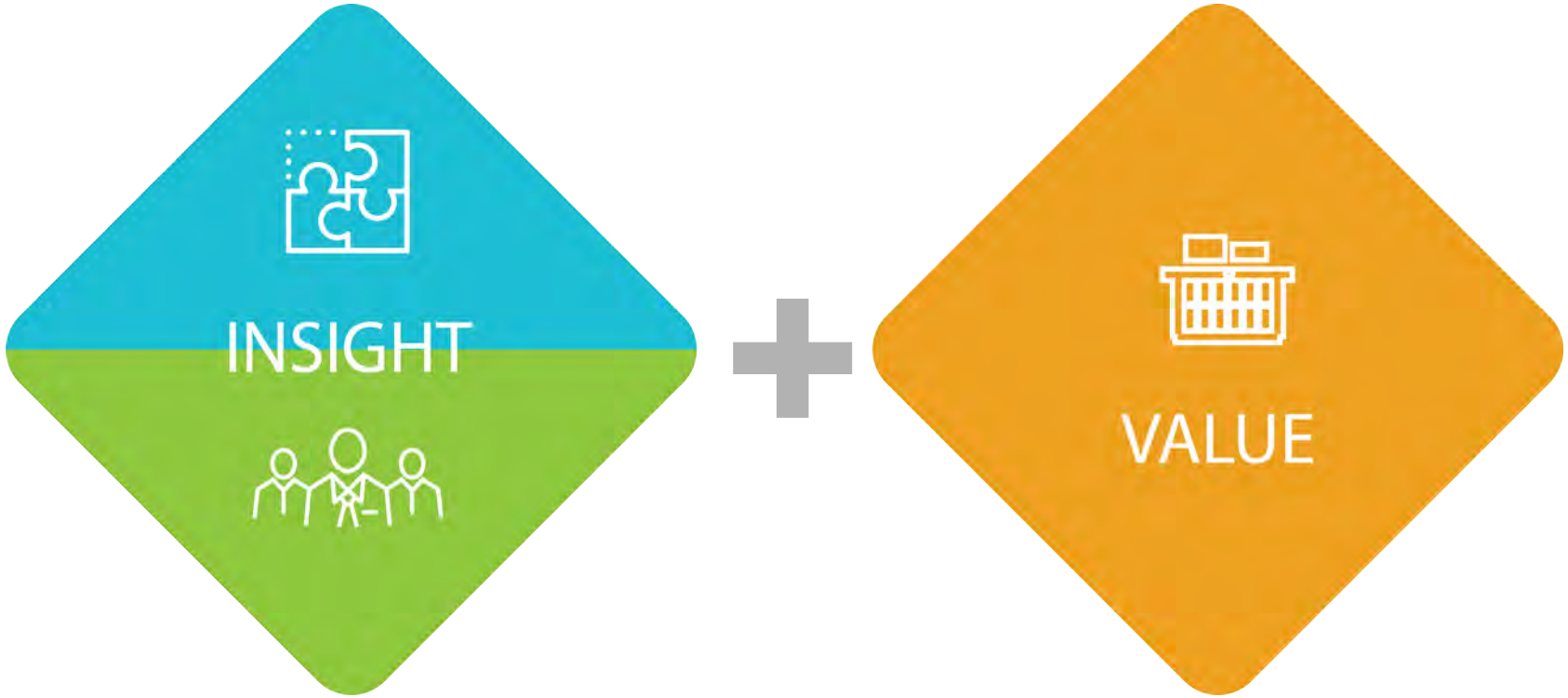
(We have) explored generative AI ancillary to other projects. Examples include "smart" technologies such as parking, transportation, SCADA for water and water resource recovery and public safety.

Bloomberg Philanthropies

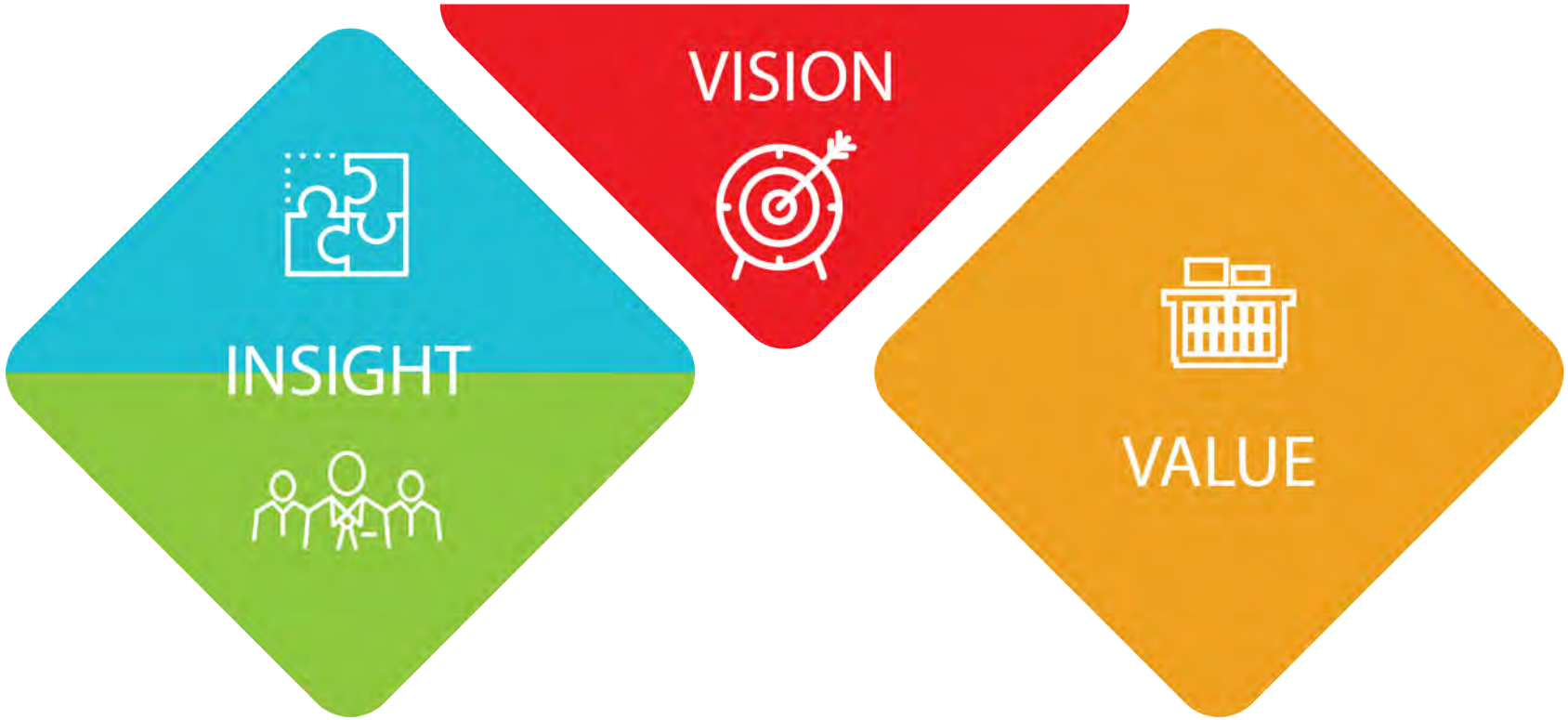
Star Trek IV: The Voyage Home (1986)

how can I help?
Make me a haircut appointment on Tuesday morning anytime between 10 and 12.
No problem. I'll make you an appointment and update you soon.

Innovation



Innovation



Wall
of
Shame

Innovation

CARNEGIE
ENDOWMENT FOR
INTERNATIONAL PEACE

Subnational Practices in AI Policy: A Working Guide

Insights

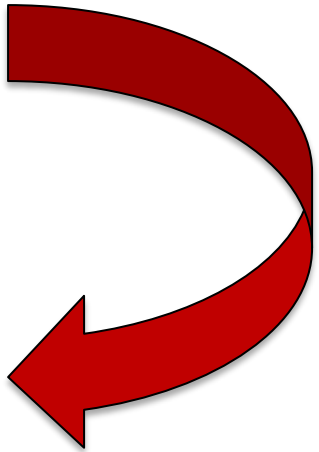
- Artificial intelligence policies and frameworks are developing rapidly at all levels of government
- Subnational governments at the state, regional, and local level have greater visibility on the global stage but that has not translated to AI policymaking
- State and local governments are acting in the absence of national policy
- At the local level there are a variety of approaches to AI adoption but the level of engagement varies widely
- The engagement varies from outright restriction – experimentation – adoption

Local Government GenAI Maturity Model

Phase O | Restricted

Phase 1 | Unengaged

Phase 2 | Limited Engagement



Phase 3 | Active Experimentation

Phase 4 | Limited Adoption

Phase 5 | Innovative

Seattle

- Artificial Intelligence Principles – Align with city's values
- Acquisition of GenAI consistent with general technology policy
- Outputs reviewed by humans
- GenAI content must be sourced to the GenAI system
- Follow's the city's data privacy and security policies

San Jose

- Iterative guidance that may be updated quarterly
- City established working groups
- Users are responsible for materials created with AI support
- Cite and record use of GenAI via a form

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

GOVERNMENT AI COALITION

Overview | Deliverables | Open Letter | Deliverables Guide | How to Join

WHAT / WHO	GOVERNMENT	CIVIL SOCIETY	ACADEMIA	PRIVATE SECTOR
VOTING RIGHTS*	Yes	No	No	No
BOARD MEMBER ELIGIBILITY	Yes	No	No	No
MAY ATTEND	• General Coalition meetings • Working group meetings	• General Coalition meetings • Working group meetings	• General Coalition meetings • Working group meetings	• General Coalition meetings • Limited working group meetings
ADDITIONAL ACTIVITIES		• Research projects • Special projects	• Research projects	• Cross-agency AI applications

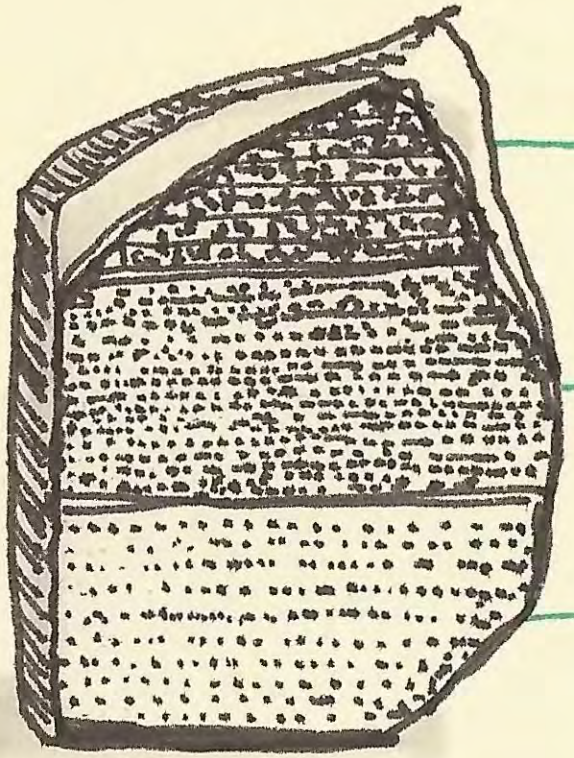
Boston

- Early guidelines to establish the responsible experimentation prior to policies and standards being created
- Generative AI is a tool
- Users are responsible for the outcomes
- Principles
  - Empowerment
  - Inclusion and Respect
  - Transparency & Accountability
  - Innovation & Risk Management
  - Privacy & Security
  - Public Purpose
- IT Department is a resource for learning about GenAI

THE ROSETTA STONE

KEY TO DECIPHERING HIEROGLYPHICS

WITH THE SAME DECREE IN 3 SCRIPTS



HIEROGLYPHIC

DEMOTIC

GREEK

ΣΟΣΤΟΥΙΝΑΙΤΑ

ChatGPT 4

How can I help you today?

Give me ideas
about how to plan my New Years resolutions

Brainstorm names
for my fantasy football team with a frog theme

Explain superconductors
like I'm five years old

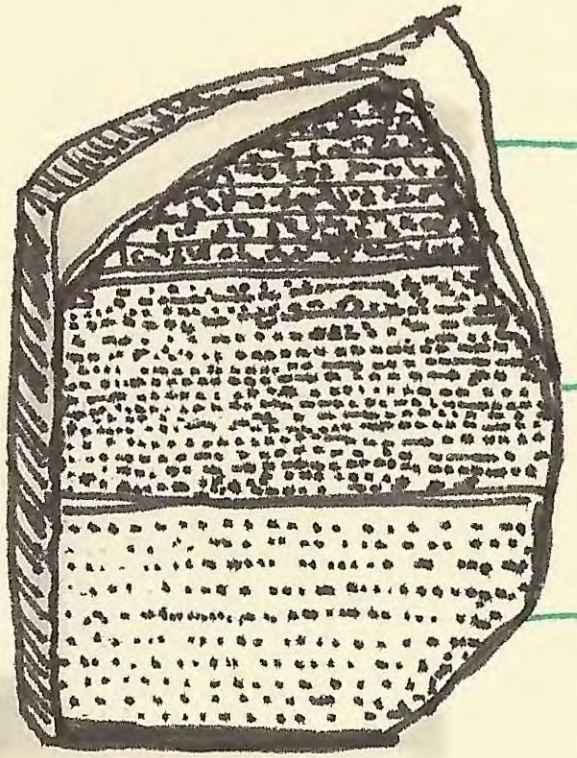
Tell me a fun fact
about the Golden State Warriors

Message ChatGPT...

ChatGPT can make mistakes. Consider checking important information.

THE ROSETTA STONE

KEY TO DECIPHERING HIEROGLYPHICS
WITH THE SAME DECREE IN 3 SCRIPTS



Empathy

Context

Insight + Value

Local Government Applications

Content Creation

Data Analytics

Coding

Civic Engagement

Digital Assistant

Economic Scan

OFFICE OF INNOVATION + ECONOMIC DEVELOPMENT

City of Carlsbad

Third Quarter, Fiscal Year 2020-2021 **April 20, 2021**

The following scan provides an overview of key economic indicators for January, February, and March 2021 for the City of Carlsbad. This economic scan is updated quarterly to provide information that is relevant to the health of Carlsbad's economy. For regularly updated information regarding the Carlsbad economy and economic development visit carlsbadca.gov/doingbusiness.

GENERAL

Carlsbad GRP *(Source: EMSI, 2020)*

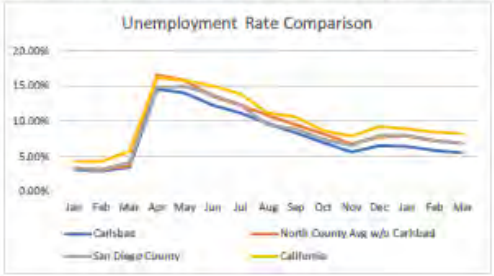
$15.3B

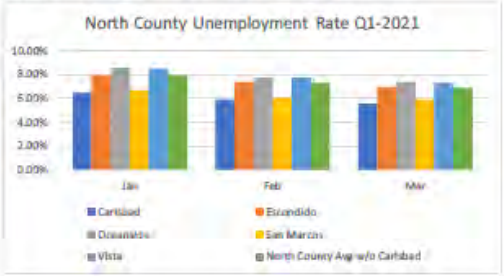
As of 2020, Carlsbad had the second largest gross regional product in San Diego County at $15.3B, only trailing the City of San Diego. From 2019, GRP remained unchanged, signaling the pandemic yielded no economic growth. Key industries driving this output are professional, scientific and technical services, computer and electronic product manufacturing and other manufacturing. These industries are generally more resilient in recessions. Another major industry, accommodation and food services, has been severely impacted by the pandemic.

JOBS

Unemployment Rate *(Source: California Employment Development Department, March Report)*

Prior to the pandemic, Carlsbad boasted a low unemployment rate of 2.9%. At the height of the pandemic, unemployment spiked to 13.8%. Unemployment improved to a low of 5.7% in November, before rising to 6.6% in December amid the surge of cases and corresponding health orders. Since then, unemployment has dropped again and now sits at 5.6%. Carlsbad continues to fare better than other North County cities, the County of San Diego, and the State of California.





Job Postings *(Source: EMSI, January - March 2021)*

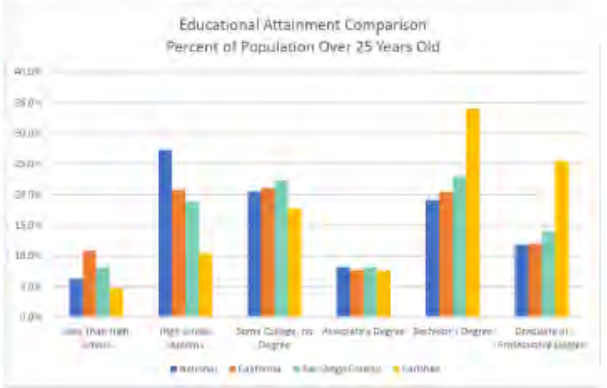
There were 10,607 unique job postings in Carlsbad between January and March, an increase of 1,065 postings from the previous quarter. This indicates a continued upswing in hiring over the past three quarters. The median posting duration was 30 days, slightly above the regional average. The median advertised salary for these postings was $46,700. As seen in the previous quarter, the top-hiring industries were manufacturing, administrative services, and professional, scientific and technical services. Recent feedback from hospitality and restaurant businesses indicate rehiring in those industries has been a challenge to employers.

10,607

TALENT + WORKFORCE

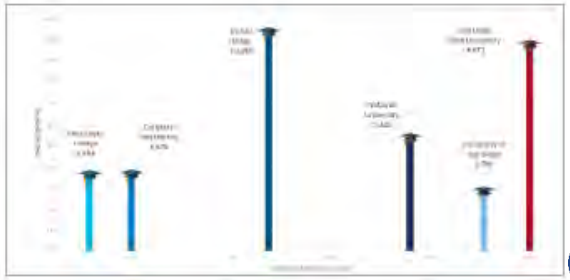
Education *(Source: U.S. Bureau of Labor Statistics - 2019)*

Carlsbad has established itself as having the right workforce to fuel innovation in tech and life sciences fields. Carlsbad businesses can access talent from San Diego, Orange County, and even southwest Riverside County. Nearly 60% of working-age residents hold a bachelor's degree, with more than 25% attaining an advanced degree. Outside of some communities in central San Diego, Carlsbad has the heaviest concentration of households with degrees in science, technology, engineering, and mathematics (STEM degrees). This is among the leading reasons that firms choose Carlsbad, the local talent.



Talent Pipeline

Nearby public and private universities offer top-notch programs. Within a 30-mile radius, more than a half-dozen universities and colleges confer more than 35,000 degrees annually. The Carlsbad business community works closely with higher education partners to align various education tracks with local workforce needs.



City of Carlsbad

Gemini Advanced

Gemini was just updated. See update

Hello, David

How can I help you today?

Generate an image in a specific style

Help me write HTML, CSS, and JS

```
<!DOCTYPE html>
 html
 head
<title>Image Slider</title>
<link rel="stylesheet"
```

Inspire me from an image

Image Analysis: I can identify the objects, people, and places in the image, as well as the overall scene and activity. For example, I can tell that the image shows a group of

Role-play as a character from a novel

Goodness, what a delightful day! The sun fairly beams upon us - I should say it's an exceptional day for a walk in the countryside, wouldn't you agree? Though I'm not certain what

Enter a prompt here

Gemini may display inaccurate info, including about people, so double-check its responses. Your privacy & Gemini Apps

5:12 5G 63%

Instagram

33 likes

sagepassiveincome 🎥 In this mesmerizing reel, a young and dynamic couple embarks on an incredible journey that leads them to an astonishing financial milestone! 💰💑💨

🔥 They have ingeniously tapped into the vast potential of e-commerce and harnessed the power of Amazon to swiftly generate a whopping $20,000 in revenue! 🚀📈💸

🧂 What sets their story apart is their unique niche in the market, as they passionately promote and sell a particular brand of salt. 🌊💎

💡 With unwavering determination and sheer entrepreneurial prowess, this couple has transformed their humble venture into a thriving business, leaving their peers in awe. 💪✨

🌟 Their inspiring journey epitomizes the boundless opportunities that await those who dare to dream big and unleash their potential in the digital realm. 💡🌐💫

🎬 So sit back, relax, and witness the magic as this young couple's tale of triumph unfolds before your eyes! 📽️✨👀🎥 @jashustles

2 days ago

[Analyst Highlight] The City's state of emergency declaration drives a Spike in Bicycle & Dockless Vehicles discussions; commenters suggest age restrictions

Popular words

During the past week, online conversations about Bicycle & Dockless Vehicles elicited 6.1K interactions - a 450% increase compared to the previous week....
Read more

The Assistant

Completely people-centered, just like you.

→ Automatically collects real-time data
→ Proactive insights
→ Export data easily
→ Customize & issue reports and Excel sheets
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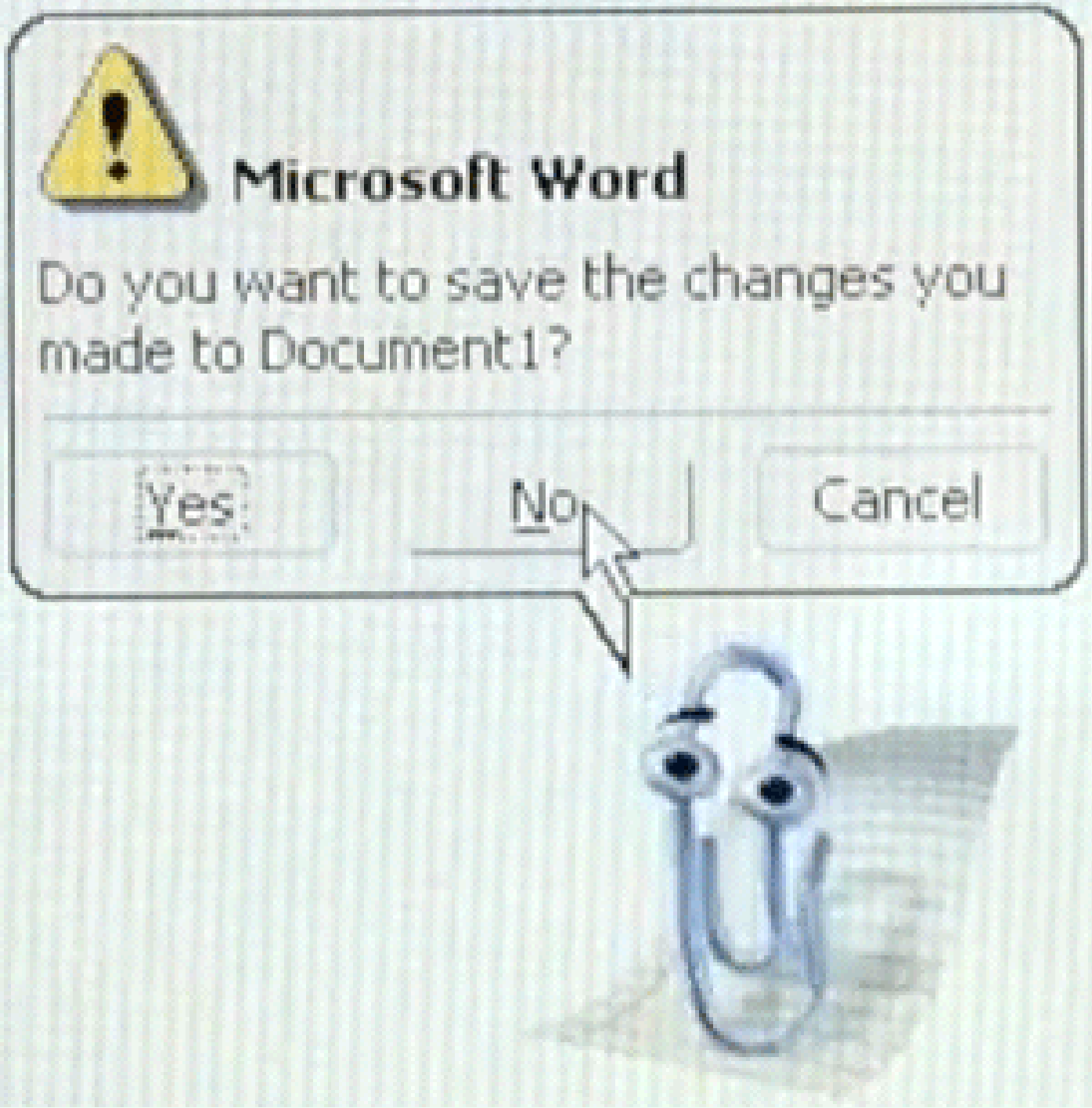
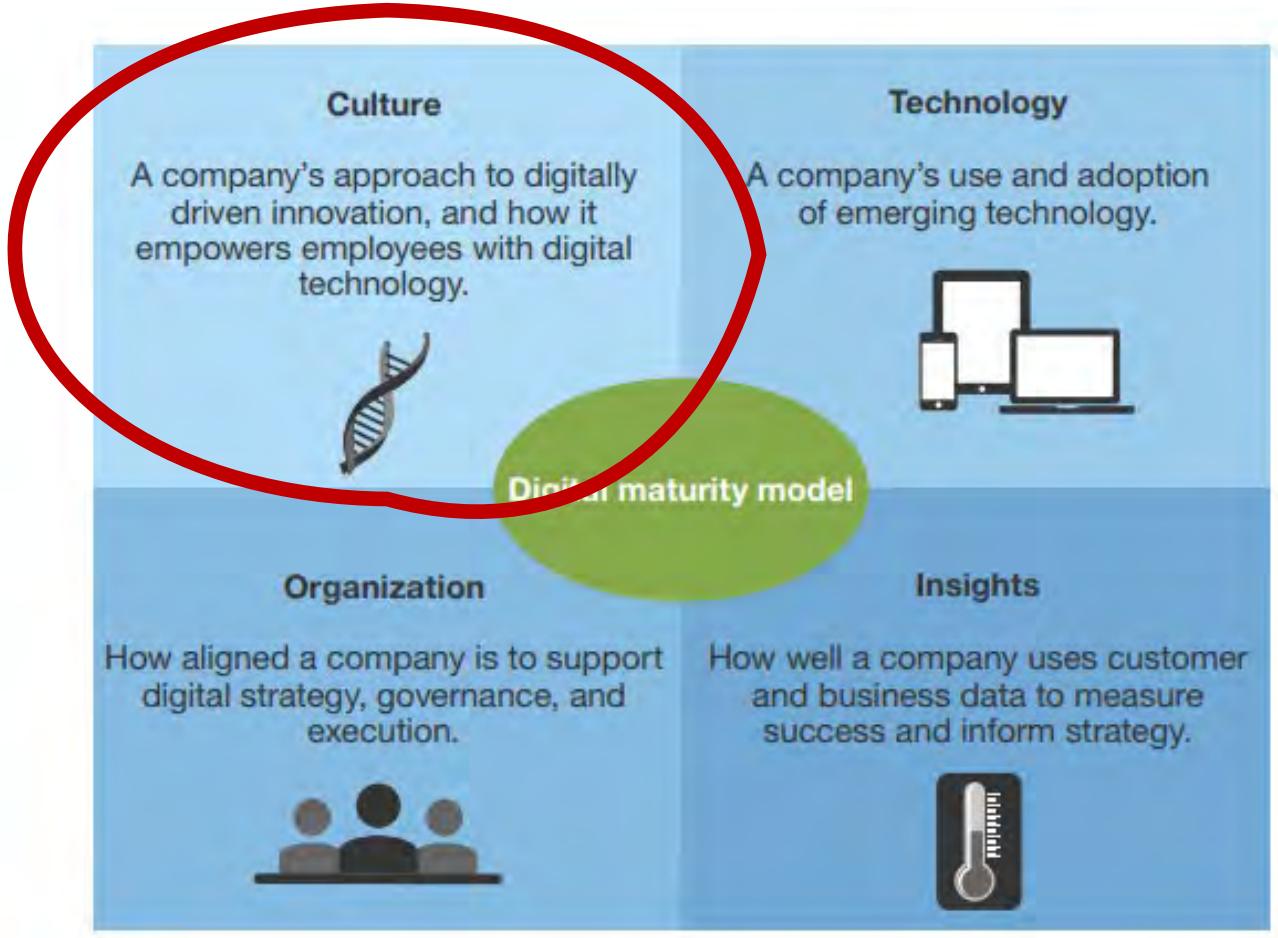
→ Integrations


Microsoft Word
Do you want to save the changes you made to Document1?
Yes
No
Cancel

Digital Maturity Model



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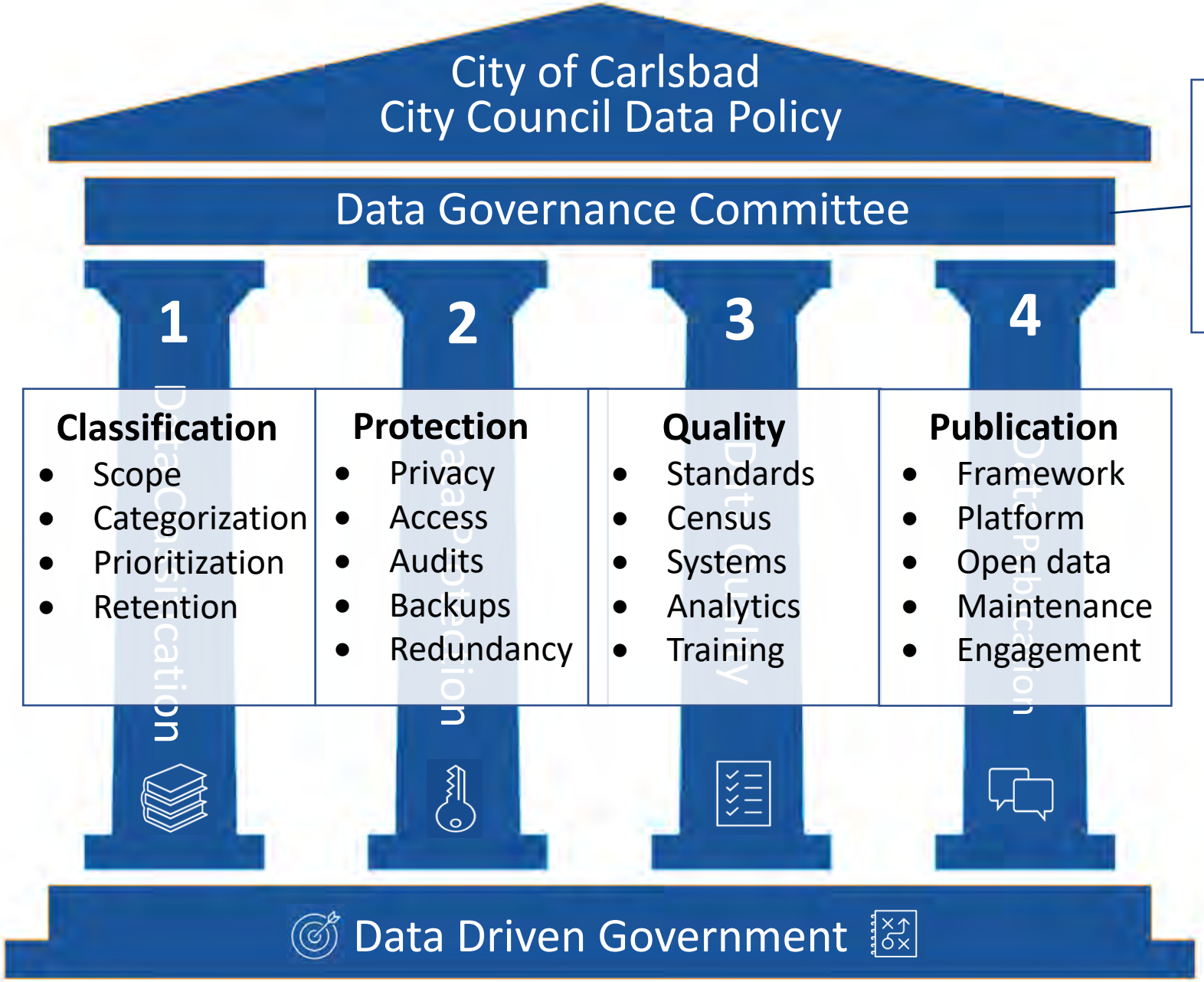

Governance

- Oversight
- Implementation
- Audit
- Council Annual Report

Chief Data Officer, Chair
Multi-Departmental

Carlsbad

- Included in the city's data policy orders
- Applies to all digital tools including Generative AI
- Is permissive in experimentation
- Focuses on professionalism and accountability
- Recognizes the value but that bias may exist
- Must adhere to privacy and security
- Respects employees and the collaborative nature of using technology for good

Common Themes

- Human in the Loop
- Privacy and Security
- Accountability
- Recognizing bias

Divergence

- Types and features of allowed or banned GenAI systems
- Employee authorization process
- IT Department involvement
- Level of granular documentation and use restrictions

Takeaways

- There are international, national, and state policy frameworks in development
- Local government engagement will be on a spectrum not ubiquitous
- Adoption should consider local context and public engagement
- GenAI presents a valuable opportunity
- The new normal is change
- Culture is key
- “The new cool” can be transform when rooted in public service values

Put
People
First