



WORLD
ECONOMICS
CUP

World Economics Cup

WEC 2024

“The Dawn of a Tech-Driven New Economy”



WEC 2024

WEC 2024, a global celebration of economic knowledge, reached its pinnacle on October 13, 2024, with the International Final. The finest minds from each continent, selected from a pool of 2191 students spanning 50 countries, came together to compete and represent their nations and regions.

Competitors won both individual and team awards at the WEC 2024.

Individual Awards

World Gold, Silver and Bronze awards are given to TOP 5%, TOP 5%-TOP 20%, TOP 20%-TOP 40% of competitors respectively based on their aggregated scores on "Fundamentals" (individual score), "Deep Comprehension" (individual score) and "Thinking and Innovation" (team score).

Team Awards

World Gold (Top 10), Silver (Top 20), Bronze (Top 30) Awards will be awarded to the participating school teams in a tiered scheme based on their team average of individual aggregated scores. The specific rankings of Global Top 10 school teams will also be announced and recognized.

The names of global top 10 school teams on "Thinking and Innovation" will be announced as well and the winning teams will receive special certificates on this module.

All the competitors will get certificates of participation from WEC.

For environmental protection and easy access, all certificates of WEC 2024 will be e-certificates. Competitors can access their certificates through a web link and could choose to print the certificate directly or download the certificate as a PDF file.

WEC 2024 by the Numbers

5th

Year

5

Continents

50

Participating
Countries
and Regions

398

Participating
Teams

2191

Competitors



Armenia



Austria



Azerbaijan



Bangladesh



Brazil



Cambodia



Canada



China



Colombia



Egypt



Fiji/ South Pacific



Finland



France



Germany



Ghana



Hong Kong, China



India



Indonesia



Italy



Japan



Kazakhstan



Laos



Latvia



Malaysia



Mexico



Monaco



Nepal



New Zealand



Nigeria



Norway



Pakistan



Panama



Poland



Portugal



Romania



Russia



Saudi Arabia



Singapore



South Korea



Sweden



Switzerland



Thailand



the Philippines



Turkey



UAE



Uganda



UK



United States



Vietnam



Zimbabwe



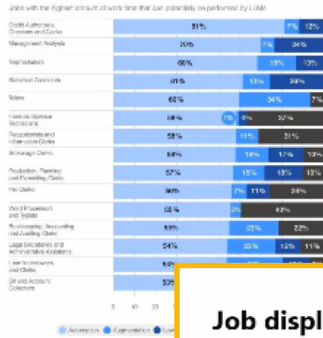
WEC 2024 Online Experience

The WEC 2024 Week online experience was a dynamic and intensive journey that brought together the finest economic minds. Finalist teams, representing their countries and regions, engaged in a diverse range of activities throughout the week. These activities were designed to test their economic knowledge, foster deep comprehension, and apply their skills to real-world challenges.

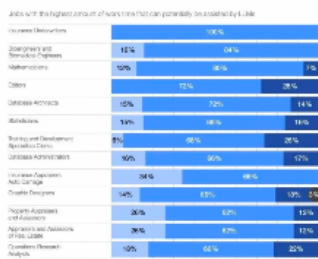
During the WEC Week, participants completed two objective tests to evaluate their economics fundamentals and deep comprehension, complemented by insightful online lecture on the topic of "The Impact of Technology on the Future of Work". The pinnacle of the WEC Week experience lay in the real-world problem-solving challenge. Participants were tasked with applying their economics knowledge to address critical issues within a tight 24-hour timeframe.

AI may not be able to take over tasks involving critical thinking and complex problem-solving, but it will be able to lend a hand.

Jobs of Tomorrow: Large Language Model and Job
Jobs with the highest potential for automation

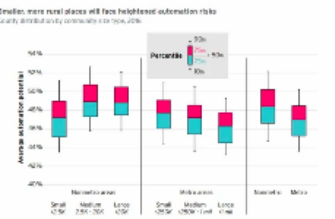
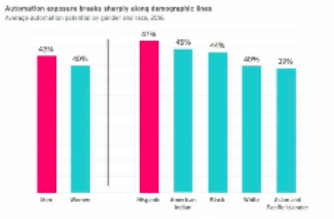
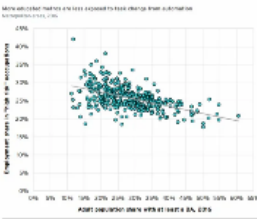


Jobs of Tomorrow: Large Language Model and Job
Jobs with the highest potential for augmentation



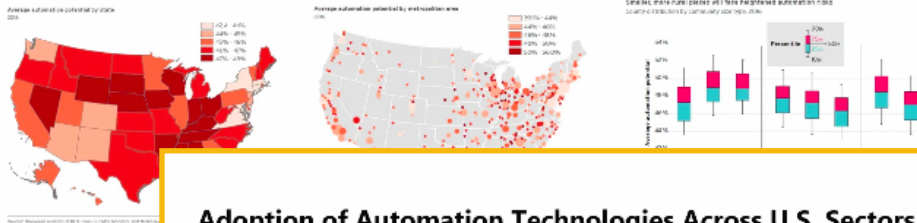
Job displacement risks reveal significant disparities among demographic groups.

- Demographic factors, such as education level, exacerbate these risks.
- Young workers, men, and underrepresented groups, particularly Hispanic and Black workers, face higher average automation exposure.



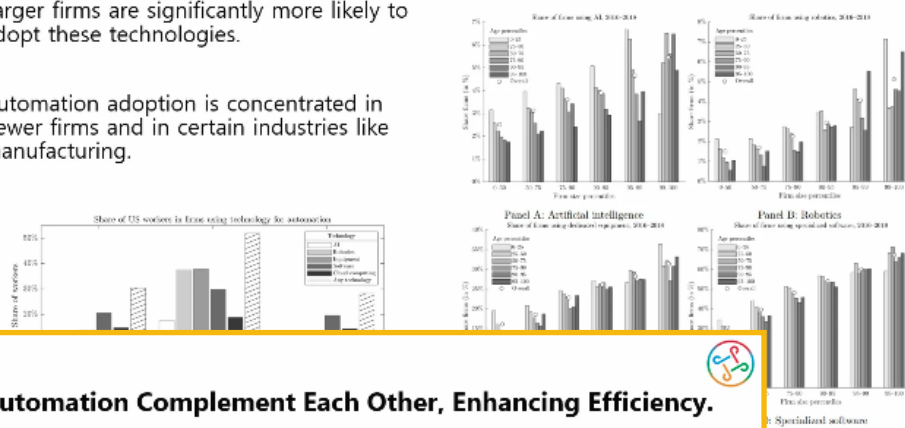
Job displacement risks due to automation vary significantly across regions.

- Regions heavily reliant on manufacturing and low-skill jobs are more susceptible to job losses from automation.
- Urban areas with diverse economies may be better positioned to adapt to changes brought about by automation.



Adoption of Automation Technologies Across U.S. Sectors

- Larger firms are significantly more likely to adopt these technologies.
- Automation adoption is concentrated in newer firms and in certain industries like manufacturing.



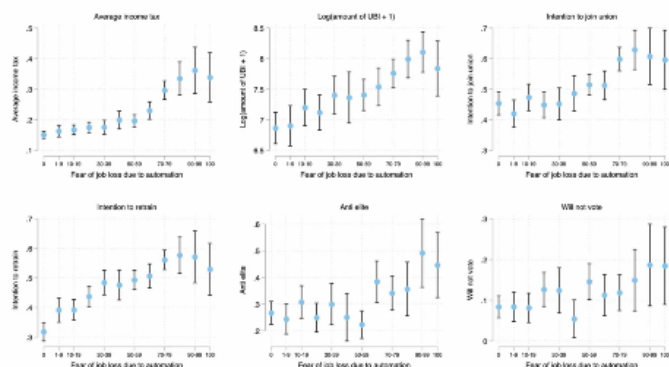
Remote Work and Automation Complement Each Other, Enhancing Efficiency.

- Complementary Roles:** Automation reduces routine tasks, while telework enables flexible working conditions, making the two technologies complementary in many jobs.
- Worker Expectations:** Data shows that occupations that are the most teleworkable are also the most automatable, meaning AI and RI often go hand in hand.



Workers' Fear of Automation Shapes Demands for Redistribution and Unionization

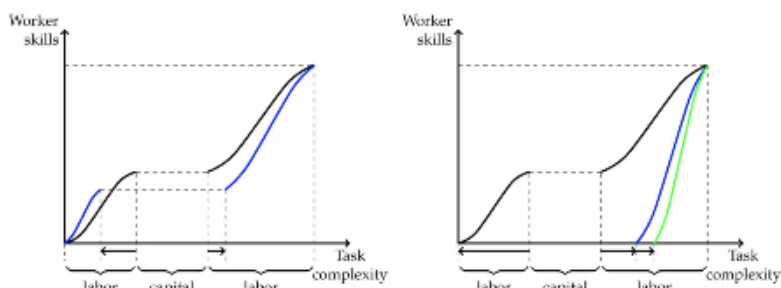
- Fear of automation was highest among younger and less educated workers, especially those in food service and transportation.
- Workers who feared automation were more likely to favor redistribution, support unions, and develop populist attitudes, showing an intention to defend against potential job displacement.





The next wave of automation may shift focus to low-skill jobs, altering inequality dynamics.

- Future automation could increasingly encroach on low-skill occupations, potentially transforming the labor landscape.
- This transition may result in a uniform increase in inequality, with low-skill workers experiencing wage declines relative to high-skill workers.



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**Deep Comprehension Online Lectures*



**Participants watch lectures and answer questions on the WEC online examination system*

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**The exam system is real-time proctored.*

2024 WEC Finals Thinking and Innovation

Lambert High School | USA

Arhan Baran | Nihal Karani
Shreem Suptia | Niharika
Ethan Beck | Balu Sivanandane

Q1: How would an influx of digital nomads impact local businesses in the short-run and long-run?

A1: Increase in demand of local products/services

Supply Curve: Remains static

Demand Curve:

- Demand curve shifts rightward
- $QD_1 = QD$ at each price level

Price Levels:

- $P_1 > P_2 > P_3$

Short-Run Effects to Expand Production Capacity:

- Increase in physical infrastructure
- Increase staff
- Adopt new technology
- Increase marketing
- Expand into new product lines

Potential Issues (Limiting Expansion):

- High inflation in ...
- Increase in labor supply
- Reduce in infrastructure availability

Long-Run Effects to Expand Production Capacity:

- Increase in physical infrastructure
- Increase staff
- Adopt new technology
- Increase marketing
- Expand into new product lines

Short-Run Supply curve shifts rightward

Price Levels:

- $P_1 > P_2 > P_3$

Solution 3: Enhancing Infrastructure

Internet Infrastructure:

Upgrading Existing Networks:

- Invest in high-speed fiber-optic broadband to ensure reliable internet access for both residents and digital nomads.
- Implement redundant systems to minimize outages and maintain connectivity.

Public Wi-Fi Access Points:

- Establish free public Wi-Fi zones in key areas (parks, town squares, beachfront) to enhance accessibility without compromising user experience.
- Collaborate with local businesses to provide Wi-Fi in cafes and restaurants, creating work-friendly environments.

Outcomes and Benefits:

- Attracts more digital nomads
- The Network effect (exemplified by Robert Metcalfe)
- Effectively manages growth of nomads

Q2: Explain how the spending by digital nomads can lead to a multiplier effect in a local economy.

Initial Spending (Autonomous Expenditure):

- Digital nomads spend on housing, food, transport, and services
- This initial spending creates a ripple effect throughout the economy

Successive Rounds of Spending:

- Businesses receive revenue, hire staff, and invest in growth
- This leads to higher household income, leading to higher demand
- Spending continues to circulate, creating further income, jobs, and demand

Multiplier Expansion:

- Additional rounds of spending occur, amplifying the initial expenditure
- This leads to higher GDP, creating jobs and economic growth

Multiplier Formula:

- $Multiplier = \frac{1}{1 - MPC}$
- High MPC (marginal propensity to consume) leads to a larger multiplier effect
- Public investment in infrastructure and services, addressing long-term needs

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Raises short-term rental supply: The tax increases the marginal cost of offering short-term rentals, shifting the supply curve left. This reduction in supply lowers the availability of short-term rentals, easing pressure on the housing market.

Raises price to \$250 per night: As the supply curve shifts leftward, the price of short-term rentals rises, following the law of supply and demand. The higher rental price moderates demand for short-term stays.

Generates \$2.5M in annual revenue: The tax introduces a steady revenue stream, which can be reinvested in public goods. This mitigates the opportunity cost of short-term rentals by using the funds to maintain housing affordability and preserve local infrastructure.

Flowchart:

- Pre-Tax Price: \$200/night
- Post-Tax Price: \$250/night
- Reduced short-term rentals
- Increased housing market stability
- Annual tax revenue: \$2.5 million
- Reinvestment in infrastructure and cultural programs
- 300 units rented for 100 days/year

Q2: The money multiplier effect exacerbating the effect of digital nomads' expenditure

Digital Nomads are high-income earners. Their spending has a larger indirect impact on the local economy due to the money multiplier effect. Long-term economic impact after an initial consumption is given by:

$$\text{long-run economic impact} = i + (m \cdot i) \cdot \frac{1}{1 - MPC} = \frac{i}{1 - m \cdot MPC}$$

Where:

- i is the initial expenditure
- m is the marginal propensity to consume
- PC is the marginal propensity to save
- i is the marginal rate of tax on income

The money multiplier effect is dependent on the marginal propensity to consume.

Flowchart:

- 5000 (Initial Spending)
- Nomads
- Spending by tax of 10%
- Spending by wage
- Local workers

Q2: Multiplier Effect of Spending by Digital Nomads

Concept and Initial Spending Impact:

- **Initial Injection:** Digital nomads' spending on accommodation, food, and services injects money into the local economy.
- **Ripple Effect:** Businesses earn revenue and use it to purchase more goods, hire staff, or invest, leading to secondary rounds of spending.

How the Multiplier Effect Works:

- **Successive Rounds:** Each dollar spent by digital nomads is re-spent by businesses and individuals, amplifying the initial economic impact.
- **Multiplier Expansion:** The multiplier formula determines the total effect ($\frac{1}{1 - MPC}$) as income continues to circulate.

Diagram:

- The diagram shows how aggregate demand (AD) increases as the multiplier effect takes place. Digital nomads' spending shifts the AD curve rightward (from AD1 to AD2 to AD3), increasing both quantity and price level in the economy.

*Participants prepared the Thinking and Innovation and submitted the video within 24 hours.

WEC 2024 Winners

Team Awards Top 10 Team (Team Grand Total)

Ranking	Country/Region	School	Average Score
1	United States	Lambert High School	320.17
2	Pakistan	International School Lahore	312.47
3	United States	Lebanon Trail High School	310.47
4	United States	Morris Hills High School	302.5
5	China	YKPao School	300.33
6	India	Hill Spring International School	299.33
7	United States	Enloe High School	299
8	Romania	Cambridge School of Bucharest	297.53
9	United Kingdom	Queen Elizabeth's School	289.67
10	India	Indus International School	288.33

Top 10 Thinking and Innovation Team

Ranking	Country/Region	School	Score
1	United States	Lambert High School	122.5
2	United Kingdom	Queen Elizabeth's School	120.17
3	United States	Morris Hills High School	120
3	United States	Enloe High School	120
5	Pakistan	International School Lahore	119.67
6	United States	Lebanon Trail High School	118.67
7	India	Hill Spring International School	117
8	Romania	Cambridge School of Bucharest	114.33
9	China	YKPao School	112.33
10	Germany	Berlin Brandenburg International School	110.67

Individual Awards

Top 30 Individual (Individual Grand Total)

Ranking	Country/Region	Name	School	Score	Award
1	United States	Neal Karani	Lambert High School	320.5	Gold
1	United States	Arhan Barve	Lambert High School	320.5	Gold
1	United States	Ethan Baek	Lambert High School	320.5	Gold
1	United States	Balaskanda Sivanandame	Lambert High School	320.5	Gold
1	United States	Shivam Gupta	Lambert High School	320.5	Gold
6	United States	Vivan Kotla	Lambert High School	318.5	Silver
7	Pakistan	Muhammad Shayaan Dar	International School Lahore	312.67	Silver
7	Pakistan	Mohammad Shayaan Akbar	International School Lahore	312.67	Silver
7	Pakistan	Muhammad Umar	International School Lahore	312.67	Silver
7	Pakistan	Khadija Naeem	International School Lahore	312.67	Silver
11	Pakistan	Abdullah Iftikhar	International School Lahore	311.67	Silver
12	United States	Nikhil Kotta	Lebanon Trail High School	310.67	Silver
12	United States	Sai Ganesh	Lebanon Trail High School	310.67	Silver
12	United States	Prithviraj Chauhan	Lebanon Trail High School	310.67	Silver
12	United States	Aarush Nigam	Lebanon Trail High School	310.67	Silver
16	United States	Zhikang Rong	Enloe High School	310	Silver
17	United States	Hrishik Gogineni	Lebanon Trail High School	309.67	Silver
18	Romania	Iulia Corcoman-Tarcolea	Cambridge School of Bucharest	306.33	Bronze
19	India	Shllok Rawat	Hill Spring International School	306	Bronze
20	Romania	Andreea-Elena Blagoi	Cambridge School of Bucharest	305.33	Bronze
21	United Kingdom	Saim Khan	Queen Elizabeth's School	305.17	Bronze
22	United States	Pranav Agarwal	Morris Hills High School	305	Bronze
23	United States	Vedant Kardekar	Enloe High School	301	Bronze
24	China	Bojun Zhang	YKPao School	300.33	Bronze
25	United States	Pheam Sunkapongse	Morris Hills High School	300	Bronze
25	India	Veddant Mehta	Hill Spring International School	300	Bronze
27	India	Arhant Jajodia	Hill Spring International School	299	Bronze
28	Romania	Iris Voinea	Cambridge School of Bucharest	298.33	Bronze
29	India	Akshat Lal	Hill Spring International School	298	Bronze
29	India	Ansh Kapoor	Hill Spring International School	298	Bronze

Fundamentals TOP 30

Ranking	Country/Region	Name	School	Score
1	India	Muthyalwad Aryan Reddy	Indus International School	99
1	India	Aarnav Lingareddy	Indus International School	99
1	India	Shashank Reddy	Indus International School	99
1	India	Muthyalwad Arnav Reddy	Indus International School	99
5	United States	Neal Karani	Lambert High School	98
5	United States	Arhan Barve	Lambert High School	98
5	United States	Ethan Baek	Lambert High School	98
5	United States	Balaskanda Sivanandame	Lambert High School	98
5	United States	Shivam Gupta	Lambert High School	98
5	United States	Vivan Kotla	Lambert High School	98
5	United States	Zhikang Rong	Enloe High School	98
12	Pakistan	Muhammad Shayaan Dar	International School Lahore	97
12	Pakistan	Mohammad Shayaan Akbar	International School Lahore	97
12	Pakistan	Muhammad Umar	International School Lahore	97
12	Pakistan	Khadija Naeem	International School Lahore	97
12	Romania	Andreea-Elena Blagoi	Cambridge School of Bucharest	97
17	Pakistan	Abdullah Iftikhar	International School Lahore	96
17	Romania	Iulia Corcoman-Tarcolea	Cambridge School of Bucharest	96
19	India	Shllok Rawat	Hill Spring International School	95
19	United States	Vedant Kardekar	Enloe High School	95
21	United States	Nikhil Kotta	Lebanon Trail High School	94
21	United States	Sai Ganesh	Lebanon Trail High School	94
21	United States	Prithviraj Chauhan	Lebanon Trail High School	94
21	United States	Aarush Nigam	Lebanon Trail High School	94
25	United States	Hrishik Gogineni	Lebanon Trail High School	93
25	United States	Pranav Agarwal	Morris Hills High School	93
25	Singapore	Yiqing Du	Hwa Chong International School	93
25	Poland	Milena Targańska	Akademeia High School	93
29	Singapore	Yunning Chen	Hwa Chong International School	92
29	Singapore	Wanting Hu	Hwa Chong International School	92

Deep Comprehension TOP 30

Ranking	Country/Region	Name	School	Score
1	United States	Neal Karani	Lambert High School	100
1	United States	Arhan Barve	Lambert High School	100
1	United States	Ethan Baek	Lambert High School	100
1	United States	Balaskanda Sivanandame	Lambert High School	100
1	United States	Shivam Gupta	Lambert High School	100
6	United States	Vivan Kotla	Lambert High School	98
6	United States	Nikhil Kotta	Lebanon Trail High School	98
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6	China	Bojun Zhang	YKPao School	98
6	Romania	Iris Voinea	Cambridge School of Bucharest	98
6	United Kingdom	Saim Khan	Queen Elizabeth's School	98
6	India	Muthyalwad Aryan Reddy	Indus International School	98
6	India	Aarnav Lingareddy	Indus International School	98
6	India	Shashank Reddy	Indus International School	98
6	India	Muthyalwad Arnav Reddy	Indus International School	98
19	Pakistan	Muhammad Shayaan Dar	International School Lahore	96
19	Pakistan	Mohammad Shayaan Akbar	International School Lahore	96
19	Pakistan	Muhammad Umar	International School Lahore	96
19	Pakistan	Khadija Naeem	International School Lahore	96
19	Pakistan	Abdullah Iftikhar	International School Lahore	96
19	Romania	Iulia Corcoman-Tarcolea	Cambridge School of Bucharest	96
25	India	Shllok Rawat	Hill Spring International School	94
25	Romania	Andreea-Elena Blagoi	Cambridge School of Bucharest	94
25	Romania	Alexandra Rublinceanu	Cambridge School of Bucharest	94
28	United States	Pranav Agarwal	Morris Hills High School	92
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28	India	Arhant Jajodia	Hill Spring International School	92
28	India	Ansh Kapoor	Hill Spring International School	92
28	United States	Zhikang Rong	Enloe High School	92
28	Canada	Daniel Zhang	Peiqiao International Education, Inc.	92