

THE MOST UNDERRATED INVENTION

in Economic History

How a single appliance reshaped where the world's economies could grow — and why Europe's summer heatwaves are putting that lesson to the test.

C1
BUSINESS
English
Reading



READ

authentic business article



VOCABULARY

12 key C1 business phrases



PRACTISE

comprehension & gap-fill



DISCUSS

real business insights



ABOUT THIS LESSON

This article traces the surprising link between air conditioning and economic development, from Lee Kuan Yew's Singapore to this summer's record-breaking European heatwaves.



BY THE END OF THIS LESSON, YOU WILL BE ABLE TO:

- ✓ Use 12 new business idioms and collocations confidently
- ✓ Discuss the link between climate and economic competitiveness
- ✓ Summarise an argument and evaluate counter-arguments

A) WARM UP — DISCUSS BEFORE YOU READ

How well does your home or office cope with extreme heat?

Do you think air conditioning is a luxury or a necessity?

Can you think of an invention that changed where people are able to live or work?

What effect do you think hot weather has on your own productivity?

The Most Underrated Invention in Economic History

In 1965, Singapore became an independent nation with no natural resources, a tiny domestic market, and a tropical climate that made outdoor work extremely brutal during daytime hours. Within a single generation, it became one of the richest countries on earth. When Lee Kuan Yew, Singapore's first prime minister, was asked in 2009 what had enabled this transformation, many expected a lecture on trade policy or education reform, but they were **caught off guard** by the simplicity of his answer:

He pointed to air conditioning. "It changed the nature of civilisation by making development possible in the tropics," he said. "The first thing I did upon becoming prime minister was to install air conditioners in buildings where the civil service worked. This was key to public efficiency."

It may seem strange to claim that a country's rapid growth **stems from** one simple appliance, but the historical evidence supports him. When air conditioning spread through American offices in the 1950s and 60s, one study found that employees who moved into cooled buildings saw their productivity rise by 24 per cent.

Before air-conditioning, the cities that **spearheaded** modern economic development all shared a mild climate — London, Paris, New York, Tokyo. However, the fastest-growing megacities today have to **contend with** much hotter conditions: Bangkok, Lagos, Jakarta, Dubai. What changed was not geography but the ability to control indoor temperature.



In summer 2026, Europe is breaking all kinds of temperature records. The continent is struggling to deal with what appears to be a new normal of blazing hot summers and **soaring** temperatures. Only around 20 per cent of European homes have air conditioning, against 80 to 90 per cent in the United States — a statistic I can personally vouch for, having spent most of the summer so far complaining about my flat. Europe may have to act fast, as its average temperature is already 1.5°C above 1960s levels, **soaring** faster than the global average.

KEY PHRASES

caught off guard

stem from

spearhead

contend with

soaring

take its toll

KEY NUMBERS

24%

Productivity rise after offices were air-conditioned (1950s–60s US study)

20%

European homes with air conditioning, vs. 80–90% in the US

1.5°C

Europe's current temperature rise above 1960s levels

Research from the Financial Times suggests that hot temperatures can **take their toll** on sleep quality, which declines rapidly after nighttime temperatures climb past 23°C. Furthermore, **stifling** temperatures in the classroom often **stifle** students' performance and lead to consistently lower test scores on hot days. Office productivity follows a similar curve, peaking around 21°C and deteriorating steadily from there — a curve which, if you're reading this from an air-conditioned office in the US, may explain why your European counterparts seem so slow off the mark in summer!

Much has been said recently about Europe potentially falling behind in terms of competitiveness. In a recent report by Mario Draghi, former President of the European Central Bank, he **pointed out** a widening productivity gap between the EU and the US, a near-total absence of new European companies reaching the scale of America's tech giants, and a workforce projected to shrink by nearly two million people a year by 2040. He proposed solutions around breaking down innovation barriers, attracting investment, and **fostering** education. He did not mention air conditioning, but if heat genuinely **stifles** cognitive performance, sleep, and output at the rates the research suggests, then a continent that is so **slow off the mark** in adopting cooling technology is putting itself at a severe disadvantage.

None of this means air conditioning is a simple fix. Thought leaders in sustainable urban design **point out that** AC-dependent societies can lose something valuable: American cities built around climate control often have a much less vibrant street life than their southern European **counterparts**, and people who become accustomed to constant 22°C indoor environments suffer more when they step outside. It could also be said that air-conditioning could **foster** inequality, as those who can't afford it would be at a severe disadvantage.

The more honest conclusion is that air conditioning works best as one part of a broader adaptation strategy rather than **a silver bullet** capable of solving every problem. Cities in hot climates that retain vibrant public life — Chengdu, Barcelona — tend to pair cooling technology with shaded public spaces, trees, and a working day structured around the heat, rather than relying on AC alone to compensate for poor urban design. For Europe, the lesson from Singapore's example is not simply "install more air conditioners," though in the short term that would help. It is that comfort, in a warming world, is an economic input rather than a luxury — and that the countries who design deliberately around their climate, as Lee Kuan Yew did, tend to be the ones who get ahead.

"It changed the nature of civilisation by making development possible in the tropics."

— Lee Kuan Yew, Singapore's first prime minister

MORE KEY PHRASES

stifle

point out

foster

slow off the mark

counterparts

a silver bullet

KEY WORDS & PHRASES

to be caught off guard

to stem from

to spearhead

to contend with

soaring

to take its toll

to stifle

to point out

to foster

slow off the mark

counterparts

a silver bullet

1 MATCH EACH PHRASE TO ITS DEFINITION, THEN COMPLETE THE EXAMPLE WITH THE CORRECT FORM OF THE WORD.

1. to be surprised by something unexpected, so that you are not prepared for it:

The board was _____ by the sudden resignation of the CEO.

2. to originate from, or be caused by, something: _____

Most of our customer complaints _____ a single faulty product line.

3. to lead or be at the front of an effort or movement: _____

Our R&D team _____ the company's move into renewable energy.

4. to deal with or struggle against a difficult problem: _____

Many retailers are having to _____ rising shipping costs this quarter.

5. rising quickly to a high level: _____

With energy prices _____, the finance team is reviewing the budget.

6. to have a harmful effect on something over time: _____

The constant travel really started to _____ her health.

7. to prevent something from growing, developing, or being expressed: _____

Rigid hierarchy can _____ creativity in a team.

8. to mention or draw attention to a fact: _____

She _____ that the figures hadn't been checked.

9. to encourage the development of something positive: _____

Open-plan offices are designed to _____ collaboration.

10. slower than expected to begin or respond to something: _____

Our competitors were _____ on digital marketing, and we gained an early advantage.

11. people or organisations with a similar role in another place: _____

She meets with her _____ in the New York office every Monday.

12. a single, simple solution that solves a complex problem completely: _____

There's no _____ for improving morale — it takes time and consistent effort.

2 ANSWER THE QUESTIONS IN FULL SENTENCES, USING YOUR OWN WORDS WHERE POSSIBLE.

1. According to Lee Kuan Yew, what role did air conditioning play in Singapore's development?

2. How has the geography of the world's fastest-growing cities changed over time, and why?

3. What connection does the article draw between this summer's heatwaves and Mario Draghi's report on EU competitiveness?

4. What criticisms are raised against relying too heavily on air conditioning?

3 GAP FILL — COMPLETE THE TEXT BELOW USING THE CORRECT FORM OF THE KEY WORDS AND PHRASES.

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A Difficult Meeting About Office Conditions

"Thank you all for coming. I want to address something directly: our European offices have been (1) _____ rising temperatures with no proper air conditioning, and it's clearly started to (2) _____ on staff wellbeing and output. Several of you have (3) _____ that our American (4) _____ simply don't face this issue, since most US offices are cooled as standard. I'll admit we were (5) _____ by how quickly this became a problem — energy costs were (6) _____ last year, so we delayed the investment, and that delay (7) _____ from our reluctance to spend during a difficult quarter. I don't think a single new air conditioning unit is (8) _____ though — we also need to (9) _____ a culture of flexible working hours during heatwaves. We were (10) _____ on this compared to our competitors, but I want facilities to (11) _____ this project from next quarter, so we don't (12) _____ creativity and focus any further than we already have."

DISCUSSION QUESTIONS

Do you think your country invests enough in adapting to rising temperatures? Why or why not?

"Comfort is an economic input rather than a luxury." Do you agree with this statement?

What other inventions, in your view, have quietly reshaped where and how people are able to work?