



DRIVING QUESTION

An innovation launched in London reaches Tokyo — six thousand miles away — before it reaches a valley two hundred miles from London. Distance has stopped deciding who gets what. So what decides?

You have just launched nine technologies into that network yourself. Now explain what you saw.

SECTION 1 – TWO WAYS A THING SPREADS

COMPARISON

In *The Columbian Exchange* a crop crept outward to whatever was next to it. In *Leapfrog* an innovation jumps to the biggest cities anywhere on earth and then works downward. Same board, opposite rule. Fill in the blanks.

	CONTAGIOUS DIFFUSION – THE COLUMBIAN EXCHANGE	HIERARCHICAL DIFFUSION – LEAPFROG
WHAT MOVES IT	Contact with the place next door. Neighbours, one hop at a time.	_____
WHAT SLOWS OR STOPS IT	Physical barriers — a climate boundary, an ocean crossing.	_____
WHO GETS IT FIRST	_____	The largest, best-connected cities — however far away they are.
WHO GETS IT LAST	_____	_____
SHAPE ON A MAP	An expanding blob, like a stain spreading.	_____

Both games use the same fourteen circles. Only the *rule* changed. In one sentence, state what changed in the real world between 1500 and today that made the rule change.

Name one thing spreading in the world **right now** that still moves contagiously, neighbour to neighbour. Explain what keeps it from jumping.

SECTION 2 – FROM YOUR OWN BOARD

EVIDENCE

Fill these in from the game you just played, then answer underneath.

LAUNCHES USED

MILESTONES LIT

PREDICTION ACCURACY

LAST PLACE TO LIGHT

Which **rank** was the last place to light up on — Alpha, Beta, Secondary, or Countryside? Explain why that is not a coincidence.

Describe one prediction you got **wrong**. What were you assuming about how the innovation would travel, and what corrected you?

SECTION 3 – WHY SOME THINGS LEAPFROG

CLASSIFICATION

Sort the nine technologies. Then do the harder part: state the test that separates the two columns. It is not "new versus old," and it is not "cheap versus expensive."

Mobile network

Digital payments

Solar microgrid

Generic medicines

Satellite internet

Fibre broadband

Cloud computing

Container shipping

Export manufacturing

⚡ LEAPFROG – REACHES THE COUNTRYSIDE

Skips a rank. Crosses the last mile.

INFRASTRUCTURE – STOPS AT THE CITY

Moves one rank at a time. Never arrives.

Write the test in one sentence: what is true of everything in the left column that is false of everything in the right?

A satellite dish is newer and far more expensive than a shipping container. Yet the dish reaches the countryside and the container never does. Explain why cost and novelty are the **wrong** way to sort these.

Pick one item from the right-hand column. Describe what would have to be *built* — and by whom — for it to reach a village. Then say why that rarely happens.

Three real cases. The game's rules were built from them.

Kenya — money without banks

Safaricom launched **M-Pesa** in 2007: send and store money as a text message, no bank account required. Kenya's landline network had never reached more than about **one telephone line per hundred people**. Mobile subscriptions passed **one hundred per hundred**. Money moved onto a network that most Kenyans had reached without ever being connected to the old one.

Safaricom; fixed-line and mobile subscription rates from ITU / World Bank development indicators.

Japan — the mobile internet, before the smartphone

NTT DoCoMo launched **i-mode** in **February 1999**, putting web pages, email and payments on ordinary mobile phones years before the smartphone existed. Japan was already at the very top of the urban hierarchy. It did not skip a rank — it was *first*.

NTT DoCoMo, i-mode service launch, 22 February 1999.

Brazil — a state-built payment rail

Pix, launched by Brazil's central bank in **November 2020**, moves money between any two accounts instantly and free. Most Brazilian adults were using it within a few years — including many who had never held a credit card.

Banco Central do Brasil, Pix launch, 16 November 2020.

All three are ways of moving *money or information*. None is a road, a port, or a power grid. Using your test from Section 3, explain why that is not a coincidence.

Kenya and Japan both ended up with advanced mobile services. Explain why only **one** of them is an example of leapfrogging.

ROSTOW'S STAGES OF ECONOMIC GROWTH (1960)

1. **Traditional society** — subsistence farming, little technology.
2. **Preconditions for take-off** — infrastructure built; commercial agriculture.
3. **Take-off** — manufacturing and urbanization accelerate.
4. **Drive to maturity** — the economy diversifies and technology spreads.
5. **Age of high mass consumption** — services dominate; consumer wealth.

Rostow's model is a **ladder**: every country climbs the same rungs, in the same order, and cannot skip one.

Kenya's landline network was never built — stage 2 infrastructure that, on Rostow's ladder, should have come first. Yet Kenyans bank on their phones. Does M-Pesa prove the rung was *skipped*, or that it was *never needed*? Take a position and defend it.

Wallerstein's World Systems theory sorts the world into a wealthy core, a rising semi-periphery, and a dependent periphery. The board you played has four ranks. Map them on — then find the row that breaks the model.

RANK ON THE BOARD	WALLERSTEIN CATEGORY	ONE CITY OR PLACE FROM THE BOARD
Alpha world city		
Beta city		
Secondary city		
Countryside		

On the board, **Rural Appalachia** sits on the bottom rank — inside the wealthiest core economy on earth. What problem does that create for a model that sorts whole *countries* into core and periphery?

Nairobi leapfrogged to mobile money — but the network, the handsets and the software were designed elsewhere. Explain how a place can leap ahead in technology and still stay dependent.

RETURN TO THE DRIVING QUESTION

Distance has stopped deciding who gets what. So what decides?

Use one case from Section 4, one of the two models, and the term last mile.

Which rank is the place you live on? Name one thing that reaches you late, or not at all, because of it.

Name one technology that could leapfrog that gap — and one reason it still might not arrive.