

# IMPERIAL

## **In Case of Emergency**

Adopting the case method for teaching sustainability

**Jay DesLauriers**  
**24/03/2025**

# In Case of Emergency

## Background

# IMPERIAL

Early Career  
Researcher Institute

# **In Case of Emergency**

## Background



# In Case of Emergency Background

Harvard Law School (1870)<sup>[1]</sup>



# In Case of Emergency

## Background

Harvard Business School (1920)<sup>[1]</sup>



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## Background

### **The Case Method**

- Real-life scenarios
- Theory into practice
- Practical decision-making

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## Background



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## Adopting the case method

### Data Structures & Algorithms (BSc Economics, Finance & Data Science)





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## Adopting the case method

### Some challenges

- Limited class time
- Quantitative subject
- Finding authentic cases

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## Adopting the case method

NEW!

## Quick Cases

Quickly immerse students in focused and engaging business dilemmas. No student prep time required.

[View All Quick Cases](#)

|                                     |           |            |        |
|-------------------------------------|-----------|------------|--------|
| Raw Material Extraction             | 100-300   | 200-600    | 4-20   |
| Raw Material Transportation         | 10-30     | 10-30      | 1-5    |
| Raw Material Preparation            | 120-320   | 200-600    | 4-20   |
| Clinker Production                  | 1200-1800 | 6000-10000 | 60-140 |
| Cement Grinding                     | 80-160    | 400-800    | 10-30  |
| Cement Packaging and Transportation | 20-40     | 100-200    | 2-10   |

#cleanse\*

- Celine @celine\_not\_dion | November 5

Quick Case 1 of 1

XFC: Evaluating the Opportunity

HBR Quick Case

The Scenario

Sue Jermain and Bob Western were giddy with excitement. They had worked on their startup idea—XFC—for six months, and they'd recently secured a meeting with Bellwether Ventures, a well-known venture-capital (VC) firm in Silicon Valley.

Jermain and Western had met at a Silicon Valley “meet-up” for aspiring entrepreneurs. Jermain was a product manager at MoneyMove (an online-payments company similar to PayPal) where she oversaw many aspects of the company’s payments processing app, until she

- **Company Type:** Private
- **Industry:** Food and beverage
- **Founded:** August 2021 in State College, Pennsylvania, USA
- **Headquarters:** State College, Pennsylvania
- **Products:** Probiotic drinks
- **Revenue:** <USD \$500,000
- **Key people:** Alden Andersen, cofounder; You, cofounder


Robot Rumors: Should I Be Worried?

START QUICK CASE

[2]



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## Adopting the case method

**Harvard  
Business  
School**

[3]

**CHRISTENSEN CENTER FOR TEACHING &  
LEARNING**

# Teaching by the Case Method

Teaching Quantitative Material

Teaching quantitative material with the case method challenges students to build their capabilities in identifying and solving problems embedded in context, think critically about approaches and assumptions, and grapple with the managerial implications of an analysis.


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## Adopting the case method

**Press Releases** > **Nature**

**[4]**

# IKEA furniture destroys some of Europe's last remaining ancient forests

 **Greenpeace International**  
10 April 2024 • 2 min read

Bucharest, Romania – Furniture manufacturers producing for IKEA are sourcing wood from some of Europe's last remaining old-growth forests in the Romanian Carpathians, including in Natura 2000 protected areas, new report finds. A Greenpeace investigation published today reveals that seven manufacturers producing IKEA's all-time favourite products, like INGOLF chairs or SNIGLAR baby cribs and beds for children, are linked to the destruction of high-conservation value forests.[1][2] At least 30 different products from these

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## Building a case

### Verifying IKEA's Supply Chain Integrity

As a sustainability analyst at IKEA, Alex is tasked with ensuring the integrity of IKEA's wood sourcing, specifically that no wood originates from old-growth forests. Recent investigations by Greenpeace revealed that IKEA suppliers in Romania might be sourcing wood from old-growth forests in the Romanian Carpathians, which are essential ecosystems threatened by logging.

Alex has data on suppliers and their sourcing networks stored in a nested structure of varying depth and must develop a systematic verification method to trace the wood source through the supply chain.

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## Building a case

### Teaching Note: Verifying IKEA's Supply Chain Integrity

#### Objectives

- Apply recursion to nested supply chain data.
- Consider real-world challenges in ethical sourcing.

**Opening (3 min)** Introduce IKEA's issue with verifying old-growth forest sourcing.

**Pastures (5 min)** What makes nested data challenging?

**Analysis (5 min)** Define base and recursive cases; sketch solution

**Coding (15 min)** Live code the solution together.

**Closure (2 min)** Recap recursion's practical benefits.

#### Board Plan

- Base and Recursive cases.
- Sketch simple recursive function in pseudocode.

CASE TEACHING

# Elevate Your Case Prep with ChatGPT

5 Ways AI Can Help You Ask Better Questions and Plan More Thoughtful Class Discussions

by Mitchell Weiss

August 3, 2023

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## Teaching the case

- Draw on students' recent knowledge
- Call on students and encourage discussion
- Guide, but develop the solution together
- Embrace 'teachable' moments



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## Other disciplines

ISBN 9781638776239

23<sup>rd</sup> International Congress on Social Sciences  
5 March -3 April 2021, Brussels

Book of  
Proceedings

[5]

### How Harvard's Case Method Can Help to Overcome the Challenges of Applied Data Science Education

Valentina Chkoniya

GOVCOPP, ISCA-UA, University of Aveiro, Portugal

Keen. Philadelphia Medical Journal, May 7, 1898.  
Greenough and Joslin. American Journal of the Medical Sciences, 1899.  
Bidwell. American Journal of the Medical Sciences, September, 1899, cxviii, No 3.  
Land. Boston Medical and Surgical Journal, 1898, cxxxix, No. 10.

[6]

### THE CASE METHOD OF TEACHING SYSTEM- ATIC MEDICINE.

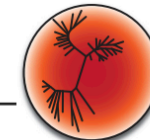
BY W. D. CANNON, A.M., BOSTON,  
*Student, Harvard Medical School.*

344 SCHOOL SCIENCE AND MATHEMATICS  
THE CASE METHOD OF TEACHING MATHEMATICS.  
By G. A. MILLER,  
*University of Illinois.*

[7]

JOURNAL OF MICROBIOLOGY & BIOLOGY EDUCATION, May 2015, p. 21-28  
DOI: <http://dx.doi.org/10.1128/jmbe.v16i1.846>

Research



[8]

### Case Study Teaching Method Improves Student Performance and Perceptions of Learning Gains <sup>†</sup>

Kevin M. Bonney

Liberal Studies, Faculty of Arts and Sciences, New York University, New York, NY 10003

How does (might) the case method approach to teaching look in your discipline?

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## Other approaches

Is case method teaching more conducive to teaching sustainability than PBL / TBL / ?

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## Sources and resources

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- [2] Harvard Business Publishing Education. Cases. [hbsp.harvard.edu/cases](https://hbsp.harvard.edu/cases)
- [3] Harvard Business School. Christensen Center for Teaching & Learning. [hbs.edu/teaching](https://hbs.edu/teaching)
- [4] Greenpeace International. Press Release. [greenpeace.org/international/press-release/66349](https://greenpeace.org/international/press-release/66349)
- [5] Chkoniya, V., 2021, April. How Harvard's Case Method Can Help to Overcome the Challenges of Applied Data Science Education. In BOOK OF PROCEEDINGS (Vol. 2, p. 160).
- [6] Cannon, W.B., 1900. The case method of teaching systematic medicine. The Boston Medical and Surgical Journal, 142(2), pp.31-36.
- [7] Miller, G.A., 1919. THE CASE METHOD OF TEACHING MATHEMATICS. School Science and Mathematics, 19(4), pp.344-349.
- [8] Bonney, K.M., 2015. Case study teaching method improves student performance and perceptions of learning gains. Journal of microbiology & biology education, 16(1), pp.21-28.
- [9] Harvard Business Publishing Education. Elevate Your Case Prep with ChatGPT. [hbsp.harvard.edu/inspiring-minds/elevate-your-case-prep-with-chatgpt](https://hbsp.harvard.edu/inspiring-minds/elevate-your-case-prep-with-chatgpt)

Other:  
[thecasecentre.org](https://thecasecentre.org)