LINGUALIZE Business Cases

TEACHING NOTE

The John Deere Case

2017 – 2026

For 180 years, John Deere has sold iron: tractors, combines, sprayers. You believe the money of the future is in what the machine knows. You are John May, and you are about to change what a tractor company is.

NÍVEL	DURAÇÃO
B1 em diante	30, 45 ou 60 min + 15 min de jogo
FORMATO	**DECISÕES**
Individual, dupla ou turma	4, cada uma com desfecho em vídeo



lingualize.com.br/business-cases-em-ingles/john-deere

ANTES DA AULA

O que este caso ensina

NEGÓCIO

Construir, comprar ou licenciar tecnologia; receita recorrente × venda única; controle do pós-venda e confiança do cliente; o que proteger na baixa do ciclo.

LÍNGUA

Argumentar e discordar em inglês (I'd rather…, The risk is…, If we…, we'd…) e vocabulário de negócios em contexto.

O FIO DO CASO

Buy the eyes → Charge for results → Fight over repair → Protect the future

Deere tried to become a technology company without stopping being a machine company. It bought what it could not build, charged for results the farmer could see and kept spending on research in the bad years. Where it held on too tight, with repair, a judge decided for it.

Como conduzir

1. **Abra com o vídeo (5 min).** Mostre o vídeo de abertura. Pergunte: o que você faria nos primeiros cinco minutos nessa cadeira?
2. **Uma decisão por vez.** Leia o briefing em voz alta (ou deixe o aluno ler), faça a pergunta e peça um voto antes de qualquer debate. Registre o voto de cada um.
3. **Discuta com as perguntas-guia.** Uma por vez. Cobre: "Why?", "Give me a number.", "Defend the other option."
4. **Revele o desfecho só depois do voto.** Cada decisão tem um vídeo curto com o que a empresa fez e no que deu. Ele é o clímax: nunca antes do voto.
5. **Feche jogando.** Os alunos jogam o caso sozinhos (15 min) e comparam o resultado deles com o real ($126B).

> **Correção de inglês.** Não interrompa o aluno no meio da frase. Anote os erros e corrija no fim de cada decisão, em bloco. O caso funciona porque o aluno se arrisca a argumentar.

VERSÕES DE TEMPO

30 min

Abertura + decisões 1 e 2. Prós e contras só da opção escolhida pela turma.

45 min

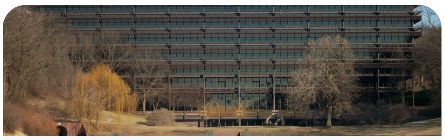
Abertura + as 4 decisões, 2 perguntas-guia em cada. Debate final com 1 pergunta.

60 min

Abertura + as 4 decisões completas, com todas as opções e o cenário alternativo. Debate final com 3 perguntas.

DECISION 1 · SEPTEMBER 2017

How does John Deere learn to see?



MOLINE, ILLINOIS

John Deere has made farm machines since 1837. For 180 years, better meant bigger: more power, wider machines. You run the technology side of the company, and you think bigger is reaching its limit.



THE PROBLEM

A sprayer covers the whole field with herbicide: the weeds, the crop and the bare soil. Most of the chemical lands where there is no weed. The farmer pays for every drop.



SUNNYVALE, CALIFORNIA

Blue River Technology has built a machine with cameras that tells a weed from a crop and sprays only the weed. Four months ago, you gave up the purchase of another precision company after the U.S. government sued to stop it.

60 Blue River team	**$87M** Blue River's last valuation	**~$1.4B** Deere R&D per year	**$2.2B** Deere net income, 2017

THE OPTIONS

HALF RIGHT

Build it

Hire engineers and develop machine vision inside Deere.

+ No price to pay for someone else's company
+ Your engineers know your machines and your farmers
− The best AI engineers want to work in Silicon Valley, not in Illinois
− A rival can buy Blue River tomorrow

IF CHOSEN

You open a lab and start hiring. Good people come slowly, and the first prototypes are years behind Blue River's. Meanwhile a competitor buys the startup, and you are racing against your own missed chance.

STRONG MOVE

WHAT JOHN DEERE DID

Buy it

Pay $305 million for Blue River, more than three times its last valuation.

+ You get the team, the technology and several years of work at once
+ No competitor can have it
− $305 million for a company with almost no sales
− Startup people often leave after a big company buys them

WHAT HAPPENED

This is what Deere did. It paid $305 million, kept the team in California and gave it Deere's machines, dealers and fields to work with.

COSTLY MOVE

License it

Sign a partnership. Put Blue River's system on your sprayers and pay per unit.

+ Almost no money up front
+ If the technology fails, you lose very little
− Blue River can sell the same system to your rivals
− Every year, the partner can raise the price or be bought

IF CHOSEN

Your sprayers get the new system quickly, and so do your competitors' sprayers. The farmer sees no reason to choose green. A few years later someone buys Blue River, and the contract you depend on is now in a rival's hands.

GUIDING QUESTIONS

1. Build, buy or partner: when is each one the right choice?
2. Deere paid more than three times Blue River's last valuation. What exactly was it paying for?
3. Why would an engineer leave after his startup is bought? How do you keep him?
4. In your industry, what technology would you buy today if you could?

acquisition aquisição: a compra de uma empresa por outra

valuation quanto os investidores dizem que a empresa vale

WHAT REALLY HAPPENED (REVEAL VIDEO)

In September 2017, Deere bought Blue River for 305 million dollars and kept its team in California. The technology took about four years to reach farms as See & Spray. In 2024, farmers who used it saved 59% of their herbicide on average.

THE LESSON

When the knowledge is far from your own, buy it, and let the team stay who they are.

DECISION 2 · 2022

How do farmers pay for the software?



A NEW STRATEGY

You became CEO in November 2019. Your strategy is called Smart Industrial: technology at the center of every machine. Farmers already manage 315 million acres on your digital platform.



THE CYCLE

Farmers buy machines when grain prices are high and stop when prices fall. Your sales rise and fall with them. Investors pay less for a profit they cannot predict.



THE PRODUCT

See & Spray is ready. Its software will get better every year. In the old model, the farmer pays once at the dealer, and you earn nothing from the improvements that come later.

230M Acres on your platform, 2020

315M Acres on your platform, 2021

$105B Market value, end of 2021

$305M Paid for Blue River

THE OPTIONS

HALF RIGHT

One price

The software is part of the machine. The farmer pays once.

+ Farmers understand it: they buy a machine, they own it
+ Nothing new to explain, bill or collect
− The machine gets much more expensive on day one
− Ten years of software updates, paid for once

IF CHOSEN

Farmers accept it without complaint. The sprayer costs much more, so fewer farmers buy it, and the technology spreads slowly. When grain prices fall, your sales fall exactly as before.

COSTLY MOVE

Yearly fee

A fixed subscription per machine, every year.

+ Income arrives every year, in any market
+ Easy for investors to understand and value
− A farmer pays even if the machine stays in the shed
− "I bought it, and I still pay rent on it"

IF CHOSEN

The first bad harvest arrives and the fee arrives with it. Farmers cancel, complain in public and look at other brands. The word "subscription" becomes an insult in farm country, and it follows you into every other debate.

STRONG MOVE

WHAT JOHN DEERE DID

Pay per acre

A fee per acre, charged only where the machine saves herbicide.

+ If it saves nothing, the farmer pays nothing
+ Lower price at the dealer, so more farmers can start
− Your income depends on how much farmers use it
− Billing by the acre needs every machine connected

WHAT HAPPENED

This is what Deere did. See & Spray is charged by the acre, and only on acres where it does not spray: in 2025, 1 dollar on empty land and 5 dollars in the crop.

GUIDING QUESTIONS

1. Why do investors pay more for recurring revenue than for one big sale?
2. As a customer, when do you accept a subscription? When does it make you angry?
3. Pay per acre moves the risk from the farmer to Deere. Why would Deere accept that?
4. Deere missed its own deadline. Was the goal wrong, or only the date?

recurring revenue receita recorrente: a que entra todo ano, sem nova venda

up front pago na hora da compra, de uma vez

WHAT REALLY HAPPENED (REVEAL VIDEO)

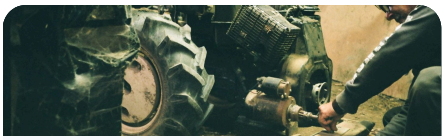
In 2022, Deere set a goal: 10% of its revenue from recurring fees by 2030. See & Spray is charged by the acre, only where it saves herbicide. Farmers adopted it more slowly than planned. In December 2025, Deere said the goal would take longer than 2030.

THE LESSON

Customers pay for results they can see, but changing how an industry pays takes years.

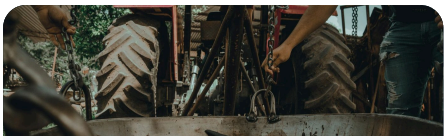
DECISION 3 · JANUARY 2023

Who is allowed to fix a John Deere?



THE LOCKED TOOLBOX

When a sensor fails at harvest, the machine can stop in the field. The complete version of your diagnostic software, Service ADVISOR, exists only at authorized dealers. The farmer waits for a technician while the crop waits too.



THE FARMERS

Farmers have taken you to court. Several states are writing "right to repair" laws. Some farmers already install pirated software from Eastern Europe to fix their own tractors.



YOUR SIDE

Parts and service bring steady money to you and to your dealers, in good years and bad. Your engineers warn that open software lets people change safety and emission settings. The biggest farm organization in America offers to negotiate.

Dealers only Full diagnostic tool

2022 Farmer lawsuits since

329M Acres on your platform, 2022

$7.1B Net income, 2022

THE OPTIONS

STRONG MOVE

Open the toolbox

Sell farmers and independent shops the same tools your dealers have.

+ The lawsuits and the new laws lose their reason
+ A farmer who can fix his machine trusts the brand more
− Dealers lose part of their most reliable income
− Someone will change the software in ways you never approved

IF CHOSEN

Deere did not do this in 2023. It is close to what a government order forced it to do in 2026, after three years of lawsuits and bad headlines. Doing it by choice, you keep the farmers' trust and write the rules yourself.

COSTLY MOVE

Hold the line

Repairs stay with dealers. Fight the laws and the lawsuits.

+ Dealers keep all of their repair income
+ You control the quality and safety of every repair
− Your own customers are organizing against you
− A judge or a lawmaker may write the rules for you

IF CHOSEN

You win some cases and lose the argument. The laws pass state by state, each one a little different. Farmers who love the machines start to hate the company, and rivals advertise tractors that you can fix yourself.

HALF RIGHT

WHAT JOHN DEERE DID

Sign a promise

A voluntary deal with the farm organization: more manuals and tools for sale, no new laws.

+ You choose what to open and what to keep
+ The biggest farm organization stops supporting new laws
− A promise is not a law: farmers can't enforce it
− The complete tool is still only at the dealers

WHAT HAPPENED

This is what Deere did. It signed a voluntary agreement with the American Farm Bureau. Farmers could buy manuals and a limited tool. The complete one stayed with the dealers.

GUIDING QUESTIONS

1. You buy a tractor. Who owns the software inside it?
2. Deere said open software is a safety risk. Is that a real reason or a convenient one?
3. Why did the voluntary agreement fail to end the fight?
4. Is there a "locked toolbox" in your own company? Who is angry about it?

right to repair o direito de consertar o que você comprou

to enforce fazer cumprir (uma lei, um contrato, uma promessa)

WHAT REALLY HAPPENED (REVEAL VIDEO)

In January 2023, Deere signed a voluntary agreement with the American Farm Bureau. It did not end the fight. Colorado passed a repair law that year, and in 2025 the U.S. government sued. In 2026, Deere agreed to pay 99 million dollars to farmers and to give independent shops the same repair tools as its dealers.

THE LESSON

Give customers what is fair, before a judge does it for you.

DECISION 4 · 2024

What do you protect in the downturn?



AFTER THE RECORD

Last year was the best in your history: 10.2 billion dollars of profit. Then grain prices fell and interest rates stayed high. Farmers are keeping their old machines.



THE FACTORIES

Dealers have tractors and combines they cannot sell. Your factories in Iowa and Illinois are building more machines than farmers are buying. Thousands of workers depend on those lines.



THE BILL FOR THE FUTURE

You spend more than 2 billion dollars a year on research: cameras, autonomy, software. In Brazil, you are building a technology center for tropical farming. Investors ask what you are going to cut.

$10.2B Net income, 2023 (record)

$2.2B R&D, 2023

388M Acres on your platform, 2023

R$180M Brazil technology center

THE OPTIONS

COSTLY MOVE

The factories

Keep the lines running. Use discounts to move the machines.

+ Thousands of skilled workers keep their jobs
+ You are ready the day demand comes back
− Discounts today lower the price of every used Deere tomorrow
− Unsold machines cost money every month they wait

IF CHOSEN

The lots fill up. Discounts grow, and farmers learn to wait for the next one. Used machine prices fall, which makes new machines harder to sell. A year later you cut production anyway, deeper, with less cash.

STRONG MOVE

WHAT JOHN DEERE DID

The research

Cut production fast and lay off workers. Do not touch R&D.

+ Dealers sell what they have before you build more
+ When the cycle turns, your new technology is ready
− Thousands of families lose their income
− You spend billions on products farmers can't afford today

WHAT HAPPENED

This is what Deere did. It cut production, laid off more than 2,000 factory workers and raised research spending to a record 2.29 billion dollars.

HALF RIGHT

The profit

Cut everything in proportion: production, research and the new projects.

+ Profit falls less, and investors calm down
+ The pain is shared: no area is protected
− Engineers who leave now take years to replace
− Rivals who keep investing arrive first at the next cycle

IF CHOSEN

The quarter looks good. The Brazil center is delayed and the autonomy team shrinks. When farmers start buying again, your rivals show machines that you had on the drawing board and stopped.

GUIDING QUESTIONS

1. Deere laid off workers one year after record profits. How do you explain that to a worker?
2. Why is R&D so easy to cut in a bad year? What is the real cost of cutting it?
3. Farming is cyclical in Brazil too. What does your company protect when prices fall?
4. Profit fell by half, and the company's value did not. What are investors paying for?

downturn a fase de baixa do mercado

to lay off demitir por falta de trabalho, não por culpa do funcionário

WHAT REALLY HAPPENED (REVEAL VIDEO)

Deere cut production and laid off more than 2,000 factory workers, but raised research spending to a record. Profit fell to 5 billion dollars in 2025. The Brazil center opened in December 2024, and Deere's platform reached about 500 million acres. At the end of 2025, the company was worth about 126 billion dollars.

THE LESSON

In the bad year, protect the future, not the quarter.

DEPOIS DAS 4 DECISÕES

Final debate

1. Is John Deere a machine company that uses software, or a software company that makes machines? Why does the answer matter?
2. The farmer owns the tractor. Deere owns the software. Who should own the data from the farmer's field?
3. Deere lost the repair fight in court after winning it for years. What would you have done in 2023?
4. Subscriptions are everywhere: cars, phones, tractors. Where is the limit for you as a customer?
5. Think of your own business. What is your “iron”? What could be your “software”?

> **Antes da primeira turma.** Jogue o caso sozinho, fazendo as decisões de formas diferentes, para conhecer os cenários alternativos que os alunos vão encontrar.

PARA IR ALÉM DO JOGO

A literatura por trás do caso

O que os autores de gestão dizem sobre cada decisão. Use uma ideia por decisão, depois do desfecho, como fecho da discussão.

Porter, M. E., & Heppelmann, J. E. (2014). How smart, connected products are transforming competition. Harvard Business Review, 92(11), 64–88.

Quando o produto ganha sensor, software e conexão, a fronteira do setor muda: quem vendia máquina passa a competir em sistema. O exemplo do artigo é o trator.

NO CASO O fio do caso inteiro: a Deere deixa de vender ferro e passa a vender decisão agronômica.

Capron, L., & Mitchell, W. (2012). Build, Borrow, or Buy: Solving the Growth Dilemma. Harvard Business Review Press.

Um roteiro para escolher entre desenvolver, licenciar ou adquirir: depende de quão longe o conhecimento está do que a empresa já sabe e de quanto controle ela precisa.

NO CASO Decisão 1. A visão computacional estava longe do que a Deere sabia: comprou a Blue River por US$ 305 milhões.

Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: a new perspective on learning and innovation. Administrative Science Quarterly, 35(1), 128–152.

A empresa só aproveita conhecimento de fora se já tiver base própria para entendê-lo. Pesquisa interna compra a capacidade de aprender.

NO CASO Decisões 1 e 4. Manter o time na Califórnia e não cortar P&D na baixa.

Vandermerwe, S., & Rada, J. (1988). Servitization of business: adding value by adding services. European Management Journal, 6(4), 314–324.

Fabricantes passam a vender pacotes de produto, serviço e conhecimento. A receita deixa de ser única e vira recorrente, e a relação com o cliente muda.

NO CASO Decisão 2. O See & Spray cobrado por acre, só onde economiza herbicida.

Perzanowski, A. (2022). The Right to Repair: Reclaiming the Things We Own. Cambridge University Press.

Quando o software trava o conserto, o fabricante controla o pós-venda. O livro reúne os argumentos econômicos e legais do movimento pelo direito de consertar.

NO CASO Decisão 3. Os tratores da Deere são o exemplo mais citado do movimento.

Gulati, R., Nohria, N., & Wohlgezogen, F. (2010). Roaring out of recession. Harvard Business Review, 88(3), 62–69.

Em três recessões, as empresas que saíram na frente cortaram custo operacional e, ao mesmo tempo, mantiveram o investimento em P&D e ativos.

NO CASO Decisão 4. A Deere cortou produção e levou a pesquisa a um recorde.

Fontes dos fatos. Releases de resultado da Deere & Company (2019, 2023, 2024, 2025), relatórios de sustentabilidade e Business Impact Reports da Deere (2020 a 2025), releases da Deere sobre o See & Spray (18/9/2024 e 4/11/2025) e sobre o centro de tecnologia no Brasil (30/11/2023), Leap Ambitions (2022 e 2025), comunicado e queixa da FTC (15/1/2025) e acordo de 8/7/2026 (ftc.gov), memorando AFBF–Deere (8/1/2023), TechCrunch, CNBC e AgFunder (6/9/2017), DTN Progressive Farmer, Farm Policy News (Universidade de Illinois). Valor de mercado: fim de cada ano, StockAnalysis e CompaniesMarketCap. P&D: Macrotrends, a partir dos relatórios 10-K. Os números do caminho do aluno são simulação.