

# TEMAS

## 1. Inteligência Artificial e Big Data na Indústria 4.0

Material de apoio

- Inteligência Artificial no Contexto da Indústria 4.0  
<https://sol.sbc.org.br/index.php/wics/article/view/11044/10915>
- Why the future for cars is connected  
<https://www.weforum.org/agenda/2021/07/why-the-future-for-cars-is-connected/>
- Industry is where the real potential of AI lies  
<https://www.weforum.org/agenda/2019/01/industry-is-where-the-real-potential-of-ai-lies/>
- Inteligência Artificial na Indústria 4.0: conheça as aplicações  
<https://certi.org.br/blog/inteligencia-artificial-na-industria-conheca-as-aplicacoes/> Predictions 2022: Data can help address the world's biggest challenges - 5 experts explain how  
<https://www.weforum.org/agenda/2022/01/data-can-help-tackle-global-challenges-2022-predictions/>
- Big Data Analytics Use Cases For Industry 4.0  
<https://acuvate.com/blog/big-data-analytics-use-cases/>

## 2. Internet das Coisas na Indústria 4.0

Material de apoio

- Industrial Internet of Things: Unleashing the Potential of Connected Products and Services  
[https://www3.weforum.org/docs/WEFUSA\\_IndustrialInternet\\_Report2015.pdf](https://www3.weforum.org/docs/WEFUSA_IndustrialInternet_Report2015.pdf)
- The engineer's guide to Industrial IoT and Industry 4.0  
<https://www.wevolver.com/article/the-engineer-s-guide-to-industrial-iot-and-industry-4-0>

### 3. Impressão 3D na Indústria 4.0

#### Material de apoio

- 10 ways 3D printing can change the world  
<https://www.weforum.org/agenda/2015/06/3d-printing-save-the-world/>
- Future cities could be 3D printed – using concrete made with recycled glass  
<https://www.weforum.org/agenda/2022/03/future-cities-3d-printing-concrete-recycle-sustainable/>
- This innovation uses 3D printing to cut concrete use  
<https://www.weforum.org/agenda/2022/01/eth-zurich-3d-printer-concrete-carbon-e-missions/>
- The affordable 3D-printed home that could transform African urbanization  
<https://www.weforum.org/agenda/2021/06/3d-printed-home-african-urbanization/>
- One-quarter of Dubai's buildings will be 3D printed by 2025  
<https://www.weforum.org/agenda/2018/05/25-of-dubai-s-buildings-will-be-3d-printed-by-2025/>
- This Swedish startup is 3D printing human organs  
<https://www.weforum.org/agenda/2018/10/this-3d-printer-could-one-day-make-new-body-parts-for-transplant-patients>
- This ceramic ink can 3D-print bones directly into a patient's body. Here's how  
<https://www.weforum.org/agenda/2021/04/3d-printer-bones-surgery-medicine/>

### 4. 5G na Indústria 4.0

#### Material de apoio

- The Impact of 5G: Creating New Value across Industries and Society  
<https://www.weforum.org/whitepapers/the-impact-of-5g-creating-new-value-across-industries-and-society>
- 5G: The Potential to Transform  
<https://www.weforum.org/videos/5g-the-potential-to-transform>
- 5G Outlook Series: Enabling Inclusive Long-term Opportunities  
<https://www.weforum.org/reports/5g-outlook-series-enabling-inclusive-long-term-opportunities>
- How 5G will change the world  
<https://www.weforum.org/agenda/2018/01/the-world-is-about-to-become-even-more-interconnected-here-s-how/>
- 5G is about to change the world in ways we can't even imagine yet  
<https://www.weforum.org/agenda/2020/01/5g-is-about-to-change-the-world-in-ways-we-cant-even-imagine-yet/>
- How 5G could speed up global growth  
<https://www.weforum.org/agenda/2018/01/5g-mobile-speed-global-gdp-growth/>

## 5. Blockchain na Indústria 4.0

Material de apoio

- Realizing the Potential of Blockchain  
<https://www.weforum.org/whitepapers/realizing-the-potential-of-blockchain>
- How blockchain is helping mining companies reduce carbon emissions  
<https://www.weforum.org/impact/the-responsible-sourcing-of-raw-materials>
- Shaping the Future of Technology Governance: Blockchain and Digital Assets  
<https://www.weforum.org/platforms/shaping-the-future-of-technology-governance-blockchain-and-distributed-ledger-technologies>
- Windows of Opportunity: Facilitating Trade with Blockchain Technology  
<https://www.weforum.org/whitepapers/windows-of-opportunity-facilitating-trade-with-blockchain-technology>
- Redesigning Trust: Blockchain Deployment Toolkit  
<https://widgets.weforum.org/blockchain-toolkit/index.html>

## 6. Realidade Aumentada para treinamento e operação na Indústria 4.0

Material de apoio

- How Augmented Reality and Virtual Reality fit into Industry 4.0  
<https://pluto-men.com/how-augmented-reality-and-virtual-reality-fit-into-industry-4-0/>
- Augmented Reality in Industry 4.0  
<https://knowhow.distrelec.com/it-and-digital/augmented-reality-in-industry-4-0/>
- Realidade Aumentada na indústria: aplicações práticas e vantagens  
<https://rodrigoportes.com.br/2022/07/12/realidade-aumentada-na-industria-aplicacoes-praticas-e-vantagens/>

## 7. Metaverso e Indústria 4.0

Material de apoio

- O impacto do Metaverso na Indústria 4.0  
<https://itsstecnologia.com.br/blogs/o-impacto-do-metaverso-na-industria-4-0/>
- The Industrial Metaverse: a game-changer for operational technology  
<https://www.technologyreview.com/2022/12/05/1063828/the-industrial-metaverse-a-game-changer-for-operational-technology/>
- Conheça os benefícios do Metaverso na indústria  
<https://www.industria40.ind.br/noticias/22616-o-metaverso-industria>

## 8. Digital twins (Gêmeos Digitais) e a Indústria 4.0

Material de apoio

- How digital twins will troubleshoot – and even help design – the buildings of the future  
<https://www.weforum.org/agenda/2021/03/digital-twin-building-construction/>
- Digital twin technology can help decarbonize cities. Here's how  
<https://www.weforum.org/agenda/2021/07/digital-twin-technology-can-help-decarbonize-cities-heres-how/>
- This AI technique could use a digital version of Earth to help fight climate change  
<https://www.weforum.org/agenda/2021/06/could-the-combo-of-a-digital-twin-and-reinforcement-learning-tackle-climate-change/>

## 9. Sustentabilidade na Indústria 4.0

Material de apoio

- Sustainability at Scale: 18 New Factories of the Future Drive Impact in the Fourth Industrial Revolution  
<https://www.weforum.org/press/2020/01/sustainability-at-scale-18-new-factories-of-the-future-drive-impact-in-the-fourth-industrial-revolution/>
- We launched the first sustainability rating for space exploration  
<https://www.weforum.org/impact/world-s-first-space-sustainability-rating-launched>
- Why sustainability is the new digital  
<https://www.weforum.org/agenda/2021/01/davos-agenda-sustainability-digital-revolution/>