

#### Industriell ekonomi & organisation

# 2024 Entrepreneurship Thesis Topics and Projects

These are just a few research projects we are in which we are involved, but you are welcomed and encouraged to suggest topics or your own.

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## 1. Sustainable Entrepreneurship in Industry 4.0: Opportunities and Challenges

- **Overview**: Dive into the world of smart manufacturing, Industry 4.0, and evaluate how entrepreneurs can lead sustainable initiatives leveraging IoT, AI, and Big Data.
- **Research Questions**: How do sustainability and the fourth industrial revolution intersect? What are the opportunities and barriers for entrepreneurs focusing on sustainable initiatives in a digital manufacturing era?

## 2. Digital Twins in Startup Ecosystems: A New Frontier in Product Development

- **Overview**: Digital Twins, virtual replicas of physical devices, have emerged as a key technology in modern manufacturing. Understand its impact on startup innovation cycles, prototyping, and market validation.
- **Research Questions**: How can startups leverage digital twin technology to accelerate product development? What are the cost and time implications for entrepreneurs?

## 3. The Role of Blockchain in Supply Chain Startups: Disruption or Evolution?

- **Overview**: The blockchain has promised to revolutionize various industries, especially the supply chain. This research would focus on its practical applications and implications for new ventures.
- **Research Questions**: How are startups leveraging blockchain to innovate within the supply chain? What are the long-term impacts, and how might this shape the future of industrial engineering?

#### 4. Circular Economy-Based Business Models: A Paradigm Shift in New Venture Creation

- **Overview**: As the global push for sustainability gains momentum, the circular economy model emerges as a key strategy for businesses. Understand the implications, opportunities, and challenges for entrepreneurs.
- **Research Questions**: How are new ventures integrating circular economy principles into their business models? What are the industrial engineering challenges and solutions in such an approach?
- 5. AI-Driven Predictive Maintenance: The New Competitive Edge for Manufacturing Startups
  - **Overview**: Predictive maintenance, powered by AI and machine learning, is changing the landscape of manufacturing. Dive into its implications for startups and the competitive advantages it offers.
  - Research Questions: How are startups integrating AI-driven predictive maintenance into their operations? What are the resultant changes in operational efficiencies, and how does this impact their market positioning?