



# HUST

**ĐẠI HỌC BÁCH KHOA HÀ NỘI**  
HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

ONE LOVE. ONE FUTURE.



# Entrepreneurship in Data Science



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# Suitable background music for coffee shops

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# Agenda

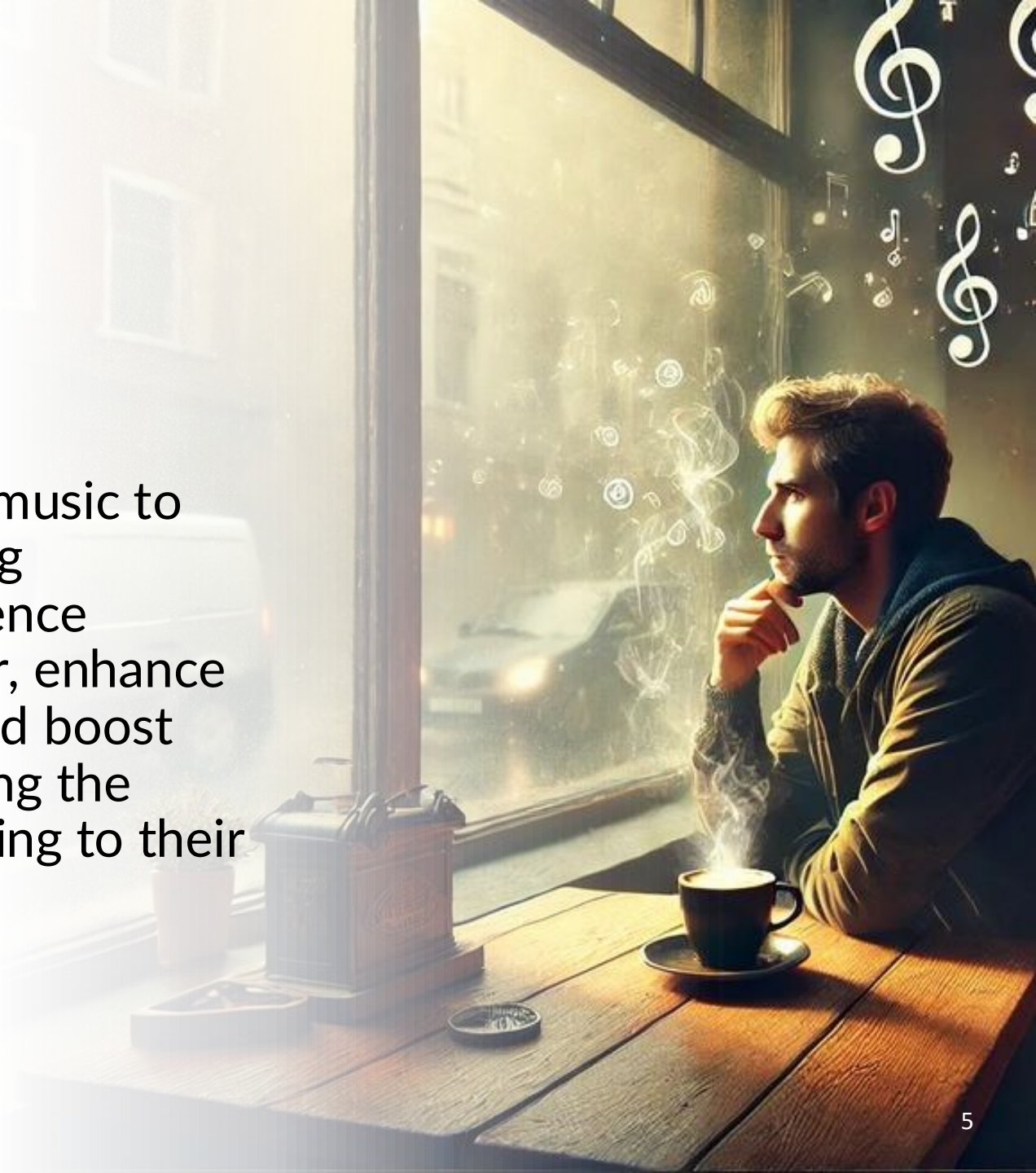
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- The chosen industries/sectors
- The business idea
- The problem to be solved
- The target and market potential



## The chosen industries/sectors

- Coffee shops use music to create a welcoming atmosphere, influence customer behavior, enhance the experience, and boost satisfaction, shaping the ambiance and adding to their unique character.

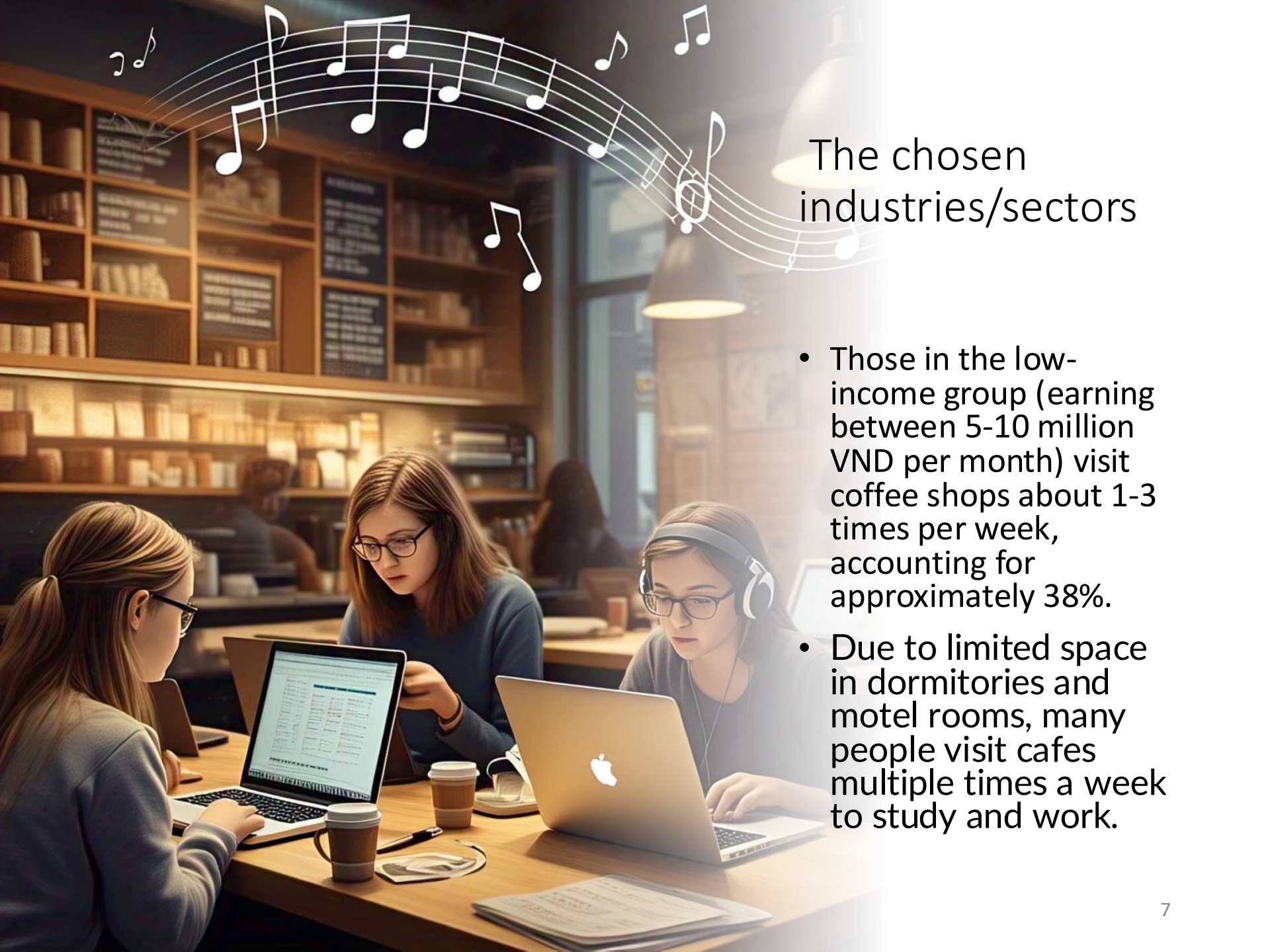






## The chosen industries/sectors

- Young people today enjoy spending time in coffee shops.
- A popular trend among the youth is: "The lower your income, the more often you visit coffee shops."



## The chosen industries/sectors

- Those in the low-income group (earning between 5-10 million VND per month) visit coffee shops about 1-3 times per week, accounting for approximately 38%.
- Due to limited space in dormitories and motel rooms, many people visit cafes multiple times a week to study and work.



# The chosen industries/sectors

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- Going to a coffee shop isn't just about the coffee. It's more than just enjoying a drink.
- It's a productive study space, a hub for teamwork, a peaceful spot to read, and a place to unwind after the stress of work or study.
- The atmosphere of a café plays a crucial role in choosing where to go.

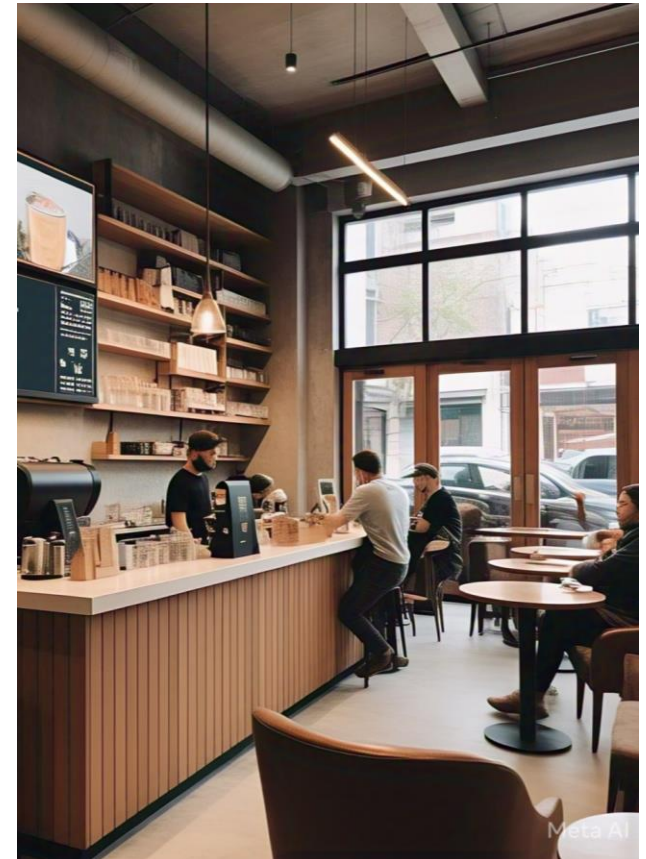




# The business idea

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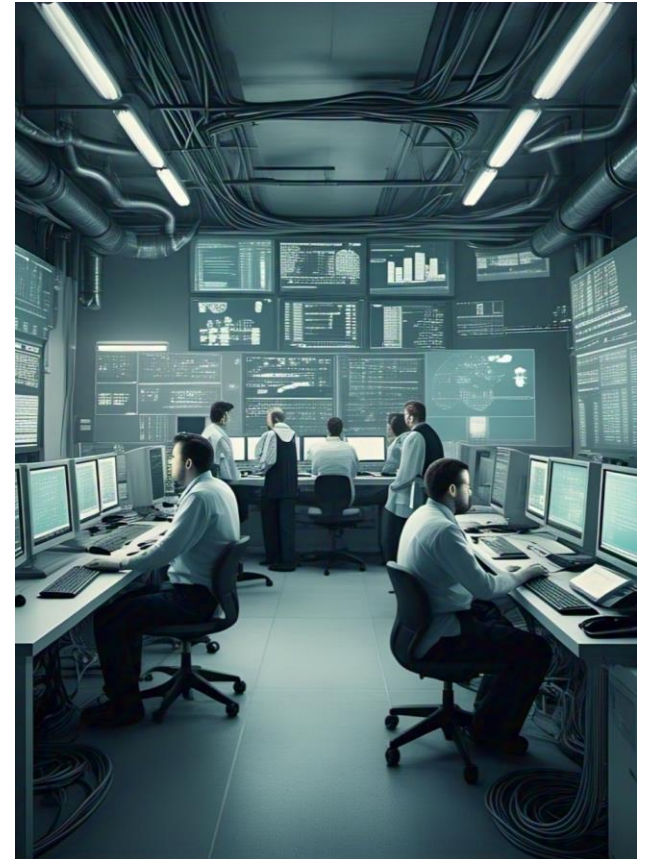
- Developing a viable business model
  - Coffee houses aim to boost their profits, and music can play a significant role in attracting customers and enhancing their experience.
  - Choosing the right background music is essential to make customers feel relaxed and comfortable.
  - However, hiring a barista skilled in selecting music tailored to clients' preferences can be expensive.
  - For coffee shop chains, artificial intelligence offers a cost-effective alternative, ensuring a consistent and enjoyable experience across all locations.



# The business idea

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- Understanding the industry
  - Our expertise lies in Computer Vision and Big Data Analysis.
  - We develop tailored artificial intelligence models to address the specific needs of the coffee shop industry.



ncs Model

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Ενδοχρηστική

Ενδοχρηστική

# The business idea

- Revenue Model:
  - Subscription Plans: Tiered pricing based on features and user capacity, ensuring accessibility for businesses of all sizes.
  - Professional Services: Offering consulting and training to help companies seamlessly integrate AI into their workflows.



# The problem to be solved

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- Personalized Music Recommendations:
  - Identify customers' identities to match music with their age, preferences, and styles.
- Emotion Detection and Analysis:
  - Monitor customers' emotions during their visit to curate music that aligns with their mood.
  - Track client interactions and gather emotional responses to each song.
  - Recommend suitable songs based on collected insights.



# The target and market potential

- Targets
  - Coffee shops with budgets dedicated to enhancing customer satisfaction.
- Market potential
  - There are hundreds of coffee shop in Hanoi
  - Customer preferences for coffee shops are influenced more by ambiance and experience than by drink taste.
  - While updating decor to meet customer preferences daily is challenging, adjusting the music is a more flexible and effective solution.



A large, stylized graphic of the HUST logo, composed of concentric circles of dots in a lighter shade of red, set against a solid red background.

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# THANK YOU !