DeloitteStiftung

Initiative D21

DIGITAL FUTURE CHALLENGE

DFC #6 Commerzbank

mit Unterstützung durch

Giesecke+Devrient Stiftung

BertelsmannStiftung

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Elevator Pitch for Commerzbank: Financial assistance for teenagers - Lumi

Lumi is a **safe, teen-first** AI that makes learning about **money** feel **natural, fun, and real.** It guides young users with **simple micro-lessons, real-life simulations, and meaningful rewards,** all without selling anything. A trusted space designed specifically for teens, offering verified guidance and protection that TikTok and ChatGPT cannot.

Lumi transforms complex financial education for teens into a safe, engaging and gamified learning experience that is free from sales, pressure and misinformation.

From the idea to the big picture – your vision as a convincing visualization

Lumi: Making Financial Learning **Easy** and **Engaging**

Lumi transforms the often-intimidating world of personal finance into an **accessible** and **exciting adventure** for young minds. We believe that true financial literacy comes from **understanding, practice, and real-world application.**

Learn Through Micro-Lessons

Bite-sized, friendly lessons cover everything from budgeting basics to investment principles, making complex topics digestible and fun.

Real-Life Challenges & Simulations

Engage with interactive scenarios that mimic real financial decisions, providing a safe space to practice without real-world consequences.

Meaningful, Real-World Rewards

Track progress and earn rewards that translate into tangible benefits, fostering a sense of accomplishment and motivation.

Guided Decision-Making

Lumi provides expert guidance, helping young users make informed financial choices, building confidence and critical thinking skills.

And as young users mature, Lumi ensures a seamless transition, connecting with Ava to provide continuous support and advanced financial tools, empowering them for a lifetime of financial well-being.

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The challenges – and what makes our solution unique

Challenge

- Only **37% of Gen Z** has a basic understand of money concepts
- **40%** of “FinTok” (Financial TikTok) has misleading or made up content
- Teen scams increased **30%** across Europe
- Teens may feel embarrassed consulting adults for financial advice
- Ethical conflict: banks must avoid sales pressure for minors
- TikTok/ChatGPT are convenient but unsafe or unverified
- Teens often lack motivation and time for traditional financial learning
- Ava is designed for adult training only

Our solution

- Lumi delivers simple micro-lessons with verified information
- Built-in scam & greenwashing warnings
- Safe, judgment-free, voice-first experience
- Fully separated from product sales (no conflict of interest)
- Gamified progress with real-world rewards
- Simulations based on authentic teen scenarios
- Future-ready: Lumi supports decisions now, Ava supports them as adults, meaning future loyal financially aware customers for Commerzbank.
- The AI implementation can adapt to teenagers requests and desires through feedback sessions

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How our solution works – and next steps

How our solution works...

- **Verified Micro-Learning:** Lumi delivers simple, age-appropriate financial lessons through short, friendly conversations.
- **Risk-Free Simulation:** Teens can practice real-life financial challenges, such as budgeting or investing, in a risk-free simulation environment.
- **Proactive Safety AI:** The system employs high-level AI guardrails to actively detect and warn users about potential scams.
- **Incentivized Engagement:** Learning is gamified; users earn real-world rewards (points redeemable for non-financial treats like cafe or cinema vouchers) by completing modules and simulations.
- **Guided Action ("Do Mode"):** When performing real transactions, Lumi acts as a "co-pilot," offering timely safety checks and ethical guidance without influencing product choices.
- **Ethical Separation:** The platform maintains a strict ethical wall, ensuring it is separate from Commerzbank's sales and product promotion to minors
- **Lifecycle Integration:** Lumi establishes a trusted, foundational relationship with teens that seamlessly transitions to the use of Ava as adults

Concrete steps for implementation are...

✓ Build Lumi as a teen-focused layer separates from Ava
✓ Create micro-lessons + risk detection + greenwashing flags
✓ Develop reward partnerships (cafés, cinema…)

Challenges of our solution are...

✓ Maintaining verified, age-appropriate content
✓ Avoiding sales influence for under-18 users
✓ Ensuring strong safety standards
✓ Managing reward partnerships

Resources needed are...

✓ AI Developers
✓ Marketing Team
✓ Data verification team
✓ Legal team review

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Extra page:

Morning Insight:
Saving Made Simple

Leo starts his day asking Lumi how to save money. Lumi explains with simple, teen-friendly examples. What felt confusing now finally makes sense.

1

Lunch Break:
Practical Planning & Rewards

At lunch, Leo tries the “Plan Your Week” simulation.He makes choices, sees the impact instantly, and earns points for a cinema discount.

2

Afternoon:
Real-Time Protection & Guidance

While shopping online, Lumi quietly warns him that a sneaker ad might be greenwashing,helping Leo stay safe without judgment.

3

Day’s End:
Confident, Informed & Secure

By evening, Leo has learned, practiced, earned rewards, and avoided a risky choice. Lumi helps him grow confident when it comes to financial decisions.

4

[Lumi Prototype] [How it works]

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Our Team   Luminators

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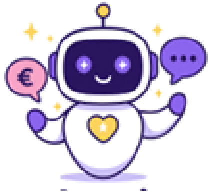

Lumi

I’m helping young teenagers learn about money in a fun and simple way.

TUM | Hochschule München

Bibliography

OECD. OECD/INFE 2023 International Survey on Adult Financial Literacy. 2023. OECD+2Studocu+2

Bank of Italy. Surveys on Financial Literacy and Digital Financial Skills in Italy: Young Adults – 2023. 9 January 2024. bancaditalia.it+2bancaditalia.it+2

Tietoevry Banking. FinCrime Insights Payment Fraud Report 2025. 30 April 2025. tietoevry.com+1

PYMNTS Intelligence. Report: Teenagers in Wealthy Nations Lag in Financial Literacy. 2024. PYMNTS.com

Bruegel. The state of financial knowledge in the European Union. 2024. Bruegel+1

European Supervisory Authorities (ESAs). ESAs Thematic Report on national financial education initiatives on digitalization, with a focus on cybersecurity, scams and fraud. 12 January 2023. EIOPA+1

OECD. Youth financial education in South-East Europe. 2021. OECD

Banca d'Italia. Surveys on Financial Literacy and Digital Financial Skills in Italy: Young Adults – 2023. 9 January 2024. bancaditalia.it+1

Better Finance. Financial Health of Europeans – Quantitative Research & Report Insights from a Pan-European Study. 2025. BETTER FINANCE