

# Assignment 1

Team Purple

01.505 Innovation by Design

Sep 2025

# Team Purple Members

- Bryant Toh
- Zhang Bingqi
- Reshmaa Vasudevan
- Pu Ye
- Kondapally Venkata Rishwanth

# Scope



Defining our Problem Statement



Impact of Problem



Market Analysis



Conclusion

# Problem Statements (Group)

Objective	End User	Situation / Environment	Reach	Impact
Improve credit access to Gig workers	Gig workers	When gig workers lack formal credit history for loans or finance	Medium	High
Reduce canteen contamination by stray birds	Dining patrons	While eating in open canteen environments	Small	Low
Reduce public transport congestion	Commuters	During peak hours on buses and trains	Large	High
Lessen EV range anxiety	EV owners	When planning or making long trips	Medium	Moderate
Enable elderly urban navigation using tech	Elderly	While navigating urban areas with digital maps or device interfaces	Medium	Moderate
Improve financial literacy in primary school children	Primary school children	During lessons or daily activities	Large	High
Facilitate integration of new citizens	New citizens in Singapore	When recently moving to Singapore and adapting to local norms	Small	Moderate
Make household item disposal sustainable and convenient	Residents	When disposing old or large household items	Large	Moderate
Improve access to mental health support for youth	Youths	When experiencing stress, anxiety, or mental health challenges	Large	High
Reduce road accidents involving vehicles and animals	Road users and animals	When animals become casualties on the roads	Medium	Low
Prevent scalpers from profiting from concert-goers	Concert-goers	When scalpers charge concert-goers exorbitant amounts for concerts	Small	Low

## Our Problem Statement

How might we develop a fun and engaging way to improve financial literacy and knowledge among primary school children in Singapore?

“

About **40%** of Singaporeans are financially literate [1] [2]

”

“

We agree it is **important to teach young people financial literacy**. This is why MOE has incorporated age-relevant financial concepts into the school curricula. [3]

”

# Socioeconomic Impact of Financial Illiteracy

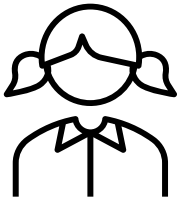
Faria, L. H. L., Medeiros, R. L., & Lyrio, F. M. (2025). *Impacts of financial illiteracy on socioeconomic well-being: A narrative literature review*. RGSA – Journal of Social and Environmental Management

[4] Researchers found that financial illiteracy had the following consequences on people's lives:

- Poor financial and risky behaviour
- Higher financial fragility/insecurity
- Lower income, less wealth accumulation
- Worse financial behaviours/attitudes
- Socioeconomic inequality and exclusion
- Psychological stress, lower subjective well-being
- Impact on education and future prospects

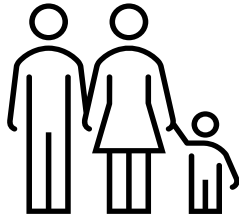
# Stakeholders

End-user



**Primary School  
children  
(7-12 years' old)**

Influencer



**Parents**

Influencer



**Teachers**

Partners



**Governments,  
financial  
institutions**

Type	End-user	Influencer	Partners
Interest	↑	↑	↓
Influence	↑	↑	↓
Implication	Co-decision-maker	Co-decision-maker	Keep satisfied

# Market Analysis (Global Solutions)

Existing Solutions	Name	Description	Strengths	Limitations
India - Multi-Module Programme	ACCA Financial Education Initiative	For schoolchildren aged 2 and up, there are four free financial literacy modules that include case studies, games, and exercises about fraud prevention and digital security.	Free for all schools, with a 2-year structure that includes games-based learning and digital security awareness.	Requires extensive training for teachers, restricted to schools that are involved, Depends on consistent school commitment; may not match all regional curricula.
India - National Programme	Money Smart School Program (National Centre for Financial Education or NCFE)	NCFE launched an initiative to provide financial literacy instruction for Classes VI–X along with evaluation and training for teachers.	National assessment framework, integrated with current subjects, comprehensive teacher training (FETP), and government-backed national programme.	Misses early primary, begins in Class VI (age 11+), Schools' voluntary acceptance, a conventional curriculum-based approach, and a lack of interactive features.
Australia - Digital Platform	MoneyTime Kids	More than 70,000 students and 750 schools use this online financial literacy programme for kids aged 10 to 14 that combines teachings with a money management game.	Self-directed learning methodology, an interactive gamified experience thorough reporting system and no teacher preparation is necessary.	Ages 10–14 only (misses early primary), requires a gadget and internet connectivity. Middle school level cost barrier, less face-to-face communication.
USA - Curriculum Integration	EVERFI Financial Literacy for Kids	For primary school pupils, there are five gamified, free interactive online classes that address needs versus wants, budgeting, saving, and borrowing.	Focus on age-appropriate elementary education, gamified interactive format, Available in both Spanish and English, and in line with academic norms.	Restricted to fundamental ideas only, Technology infrastructure is required, teacher assistance is required, and there is little practical application.
Australia - Bank Partnership	Junior Finance Academy (University of Newcastle + Greater Bank)	For children in Years 3–4, there are four video courses that include workbooks that address money concepts, counting, and real-world applications.	Bank-university cooperation, content tailored to primary school students' ages, certificate of completion, and a learning format based on videos.	Restricted to just four lessons, concentrating on fundamental financial ideas, No continuous reinforcement, needs external cooperation.
USA - State Implementation	Ohio Financial Literacy Curriculum	Comprehensive K–12 curriculum guides that address risk management, investment, consumer awareness, planning, and financial responsibility and are in line with state standards.	Full K–12 development, curriculum that is linked with standards, multi-topic, all-encompassing strategy, and implementation with lots of resources.	State-specific emphasis, stringent standards for teacher preparation, conventional classroom-based instruction, and a lack of engagement tactics.



# Market Analysis (Existing Solutions in SG)

Existing Solutions	Name	Description	Strength	Weakness
Education programmes	MOE Curriculum Integration	Age-appropriate financial literacy content infused in subjects like Character Education and Mathematics, teaching basics like needs vs wants, thrift, spending within means.	Systematic, nationwide coverage, rooted in formal education curriculum; reinforced by MoneySense outreach programs.	May be too academic or abstract for some younger children without experiential elements.
	MoneySense for Your Child Workshops	Activity-based workshops involving parents and children focusing on healthy money habits, practical budgeting, and financial planning.	Encourages parental involvement; practical and interactive; targets multiple age groups including primary school children.	Requires parental engagement, which can vary; workshops may not reach all children equally.
	Financial Literacy Programme at Punggol Primary	Experiential setups like Kidzania-inspired booths for hands-on learning of earning, spending, saving, and giving money concepts.	Encourages real-world experiential learning; highly interactive and immersive for primary students.	May require significant resources and coordination; scalability may be limited to schools with capacity.
	Institute for Financial Literacy (IFL)	Free, unbiased financial education with focus on money management, insurance, investment, and long-term planning delivered via interactive workshops.	Comprehensive curriculum; expert-guided; free and accessible; practical learning tailored for different age groups.	Primarily workshop-based; may not be integrated into daily school curriculum.
Interactive games	Kerchingggg!	Free interactive pop-up ATM kiosks with quizzes and minigames teaching money concepts like saving, digital money, needs vs wants, investing, scams, and spending wisely.	Engaging, gamified, memorable, covers comprehensive financial concepts suitable for primary children; supported by POSB.	Requires physical space and power points in schools for kiosks; limited duration per school visit.
	Playmoolah by POSB	Online lessons and activities with mascot characters teaching money management through short, engaging sessions.	Easily accessible online; engaging for young users; supported by major bank; usable at home and school.	May lack face-to-face interaction; depends on digital access and motivation to self-learn.
	Cha-Ching by JA Singapore	Kid-friendly financial literacy content combining games, storytelling, and activities.	Attractive to children; good mix of entertainment and education; established programme with proven methods.	May require school or parental facilitation; possibly limited scope in depth of financial topics.
	Catching Insomnia	Created by CPF Board to attract primary school students where they learn key financial concepts through the game	Good in capturing students' attention combining entertainment and learning.	Students may be more focused on the game and not see the relevance of financial management in the game.

# Conclusion

Financial literacy rate in Singapore appear to be low notwithstanding Singapore's relatively high GDP per capita [5]

Currently no comprehensive, structured financial literacy programme for primary school children in Singapore

A coordinated effort is needed: integrate financial education into the curriculum, support teachers, involve parents, and ensure all students have access to suitable resources

# References

1. Alessia Sconti & Dave Fernandez. (2023). *The importance of financial literacy: Evidence from Singapore*. Journal of Financial Literacy and Wellbeing, Cambridge University Press, 1(2), Page 225-243.
2. Abram Lim. (2025). *7 Financial Literacy Statistics in Singapore: Survey Findings (2025)*. Smartwealth.sg, <http://smartwealth.sg/financial-literacy-singapore-statistics/>
3. <https://www.moe.gov.sg/news/forum-letter-replies/20240408-key-concepts-of-financial-literacy-incorporated-in-school-curricula>
4. Faria, L. H. L., Medeiros, R. L., & Lyrio, F. M. (2025). *Impacts of financial illiteracy on socioeconomic well-being: A narrative literature review*. RGSA – Journal of Social and Environmental Management, 19(5), Page 1-20.
5. <https://www.visualcapitalist.com/ranked-countries-with-the-highest-gdp-per-capita-in-2024/>
6. <https://ifl.org.sg/>
7. <https://www.moneysense.gov.sg/about-us/>
8. <https://abmagazine.accaglobal.com/global/articles/2021/sep/acca/financial-education-for-kids.html>
9. <https://ncfe.org.in/mssp/>
10. <https://www.moneytimekids.com/australian-financial-literacy-for-kids>
11. <https://www.newcastle.edu.au/school/newcastle-business-school/greater-bank-finance-lab/financial-literacy-for-stage-2-primary-school-students>
12. <https://www.clevelandfed.org/financial-literacy-curriculum>
13. <https://everfi.com/courses/k-12/financial-literacy-elementary-students/>
14. <https://www.cpf.gov.sg/member/infocenter/youth-engagement/catching-insomnia-game>