

#startable

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THE CHUA THIAN POH
ENTREPRENEURSHIP EDUCATION FUND



**NANYANG
TECHNOLOGICAL
UNIVERSITY**
SINGAPORE

Nanyang Technopreneurship Center



Institute of Technical Education

AI CALLIGRAPHY

Express the very souls of words through AI

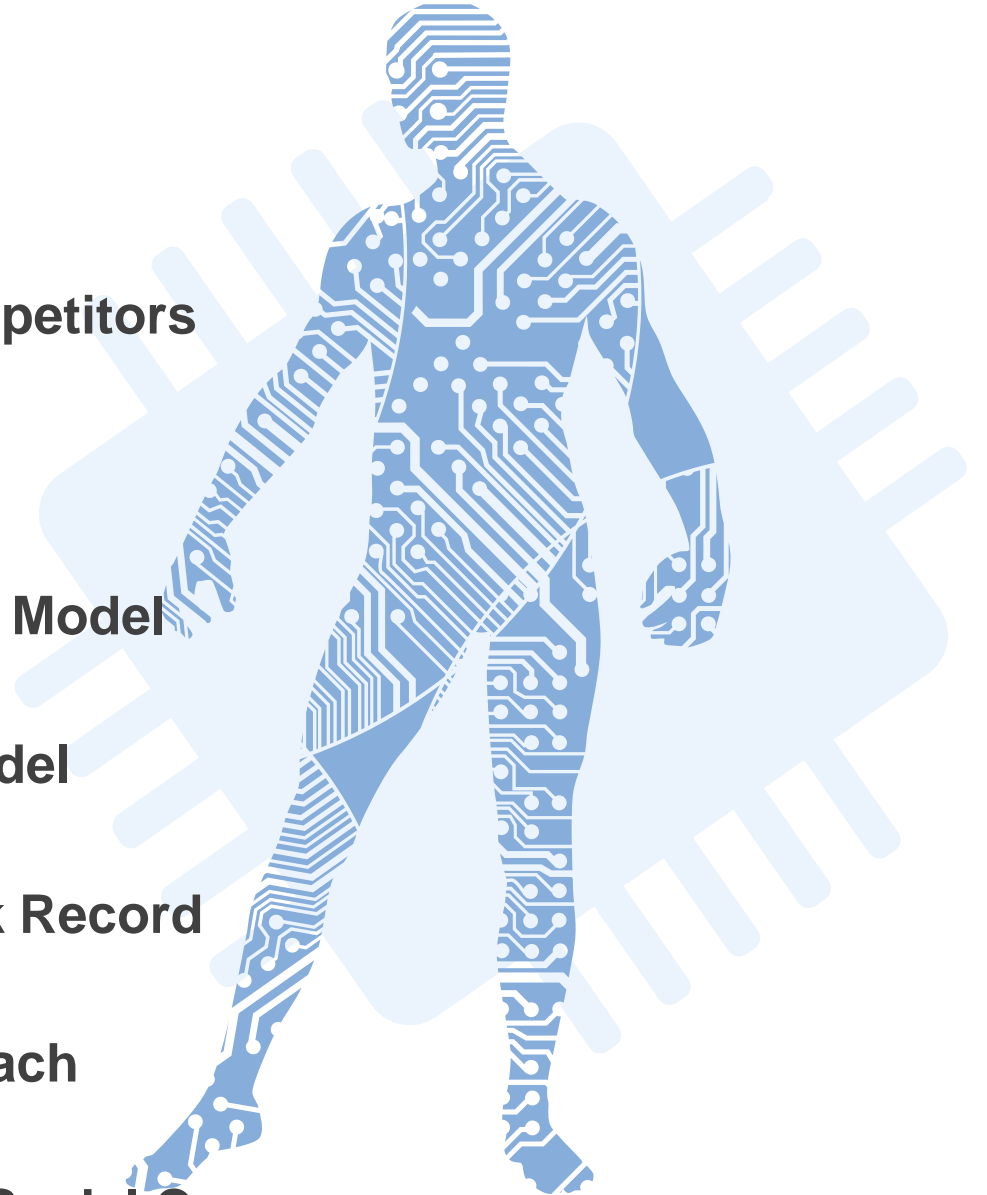


The Team Members:

- **Rejey Ezekiel (Leader)**
- **Ng Wei Jian Lucas (Leader)**
- **Setia Budi (Member)**
- **Chin Guan Yu (Member)**
- **Muhammad Irwan Bin Kamalludin (Member)**
- **Agnes Leng Jia Wei (Member)**

Agenda

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|-----------|------------------------------|-----------|-------------------------|
| 01 | What started AI Calligraphy? | 09 | Digital Store |
| 02 | What is Chinese Calligraphy? | 10 | Existing Competitors |
| 03 | Incorporating AI | 11 | Our Strategy |
| 04 | How it Work | 12 | Our Revenue Model |
| 05 | Our Service | 13 | Cashflow Model |
| 06 | Sales Plan | 14 | Proven Track Record |
| 07 | Target Audience | 15 | Public Outreach |
| 08 | Social Media Marketing | 16 | Champion a Social Cause |



1. What started AI Calligraphy?



- Decrease of **popularity and attractiveness** in Chinese calligraphy among the new generation.
- Requires **years of practicing** to reach Mastery level.
- Society has evolved to one that is sterile and uncaring, with people spending too much time on their gadgets.

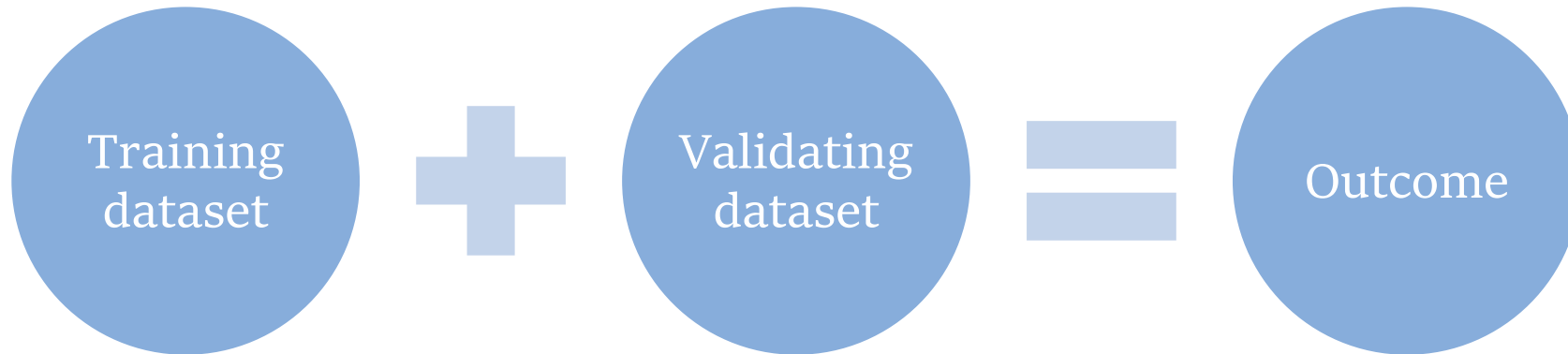
2. What is Chinese Calligraphy?

Calligraphy, literally means "beautiful writing". It is appreciated as an art form in many cultures throughout the world. Chinese calligraphy is the writing of Chinese characters as an art form.



3. Incorporating AI into Calligraphy

Zhao Mengfu (1254–1322), was a famous Chinese painter and calligrapher during the Yuan Dynasty. We can replicate his calligraphy art style through AI.

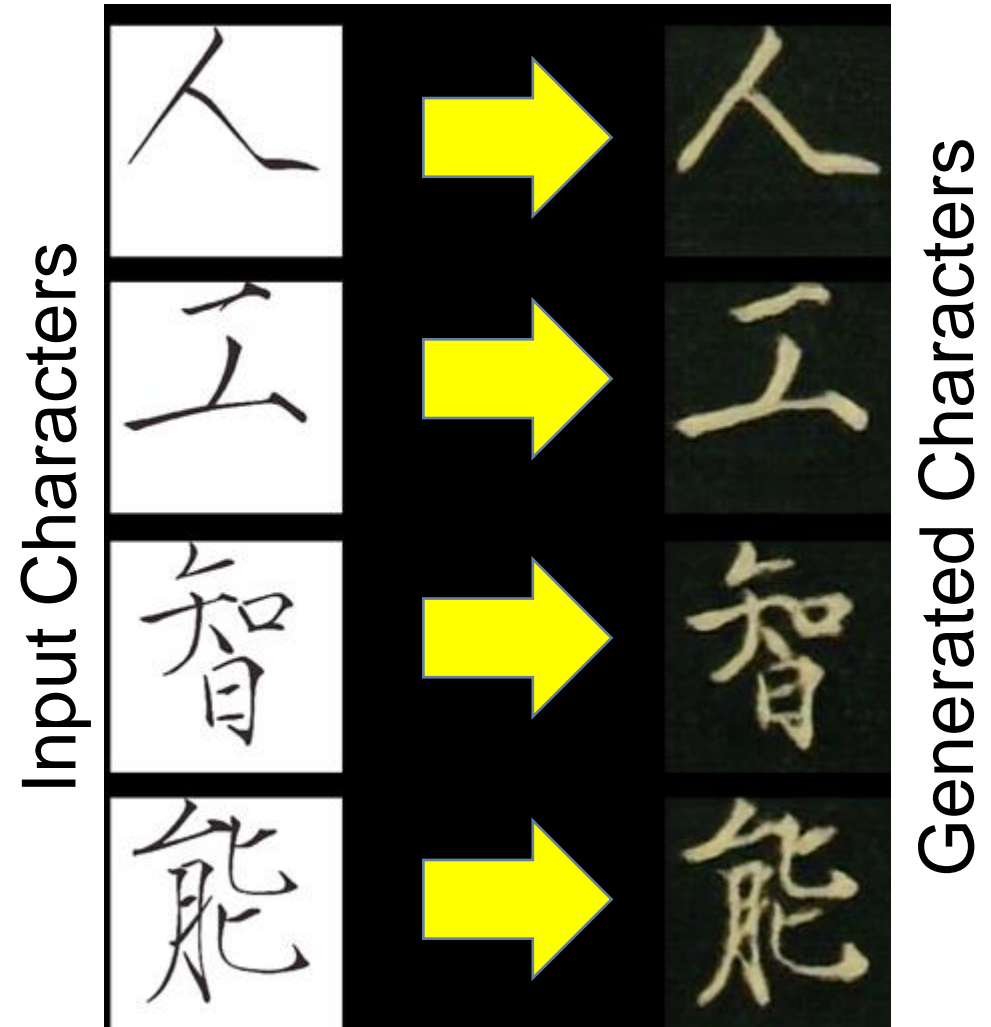


~200 cursive characters from Zhao Mengfu's Thousand Character Classic in Regular and Cursive Script. 《赵孟頫真草千字文》

4. How it works

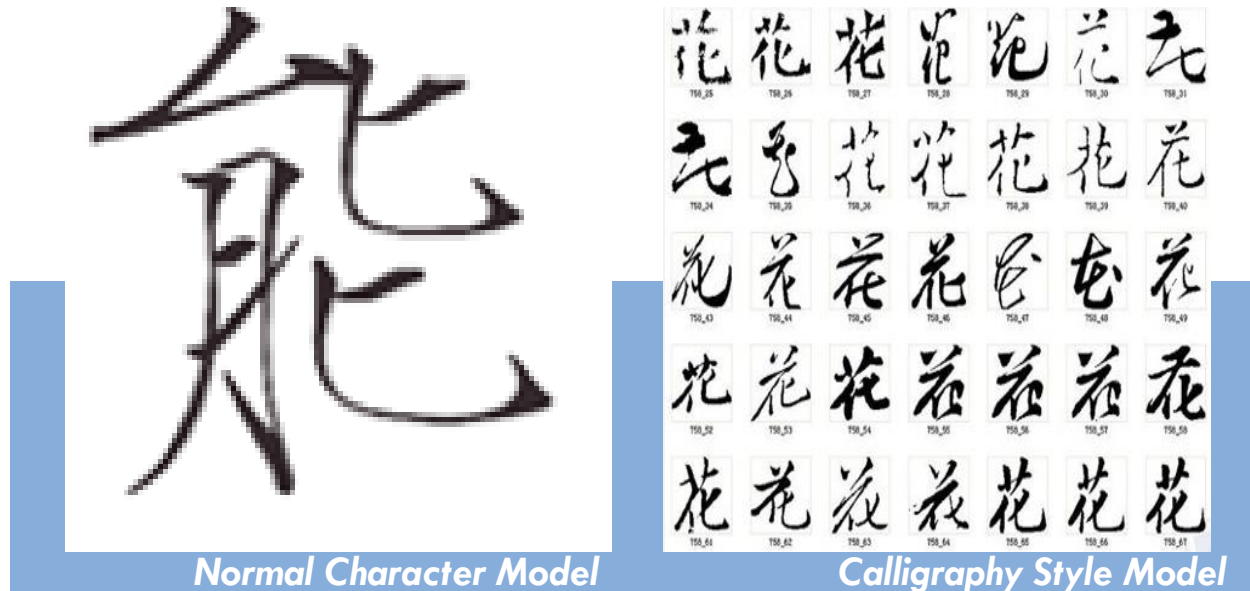
- Uses Pix2Pix is a Generative Adversarial Network (GAN) model designed for image-to-image translation.
- Fuses previous works of famous calligraphers (a calligraphy model and a normal character model)
- Produces a new calligraphy character that reflects the style drawn from the original dataset.

The training will take approximately **2 hours** on HPC Colab.



5. Our Service – (AI Calligraphy)

AI Calligraphy *Digital Copy*



- We provide **customizable AI Calligraphy Artwork** to our customers.
- Each digital AI art piece cost **\$5**.



6. Sales Plan

This year our students are introducing a new style of Motivational Gift Cards through deep learning AI GANs (Generative Adversarial Networks)!

The creation process learn the input data patterns of Zhao Mengfu (1254-1322), a famous Chinese calligrapher during the Yuan Dynasty. The model then generates a new calligraphy that reflects the style drawn from the original dataset.

Picture Sizing / Pricing

A4 Size - **\$20** (premade)

4R Size - **\$5** (premade)

A4 Size - **\$30** (custom)

4R Size - **\$8** (custom)

Mug - **\$30** (premade)

+\$10 for frame*

(net price inclusive of designer cost) **Order Now!**





- People who are interested in Calligraphy (1 Billion Market Sales Value 2021)
- Heritage Centres
- Museums
- Schools
- Community Centers' (CCs and RCs)
- People of ages > 6 years old



8. Social Marketing

Online Posts

Posts of Calligraphy characters done by students.

Description:

Motivational gift card is created using Google Colab done by inputting normal Chinese characters and the output is calligraphy characters.



Like and Share!

Facebook

Instagram

<https://www.instagram.com/ai.calli>

Carousell

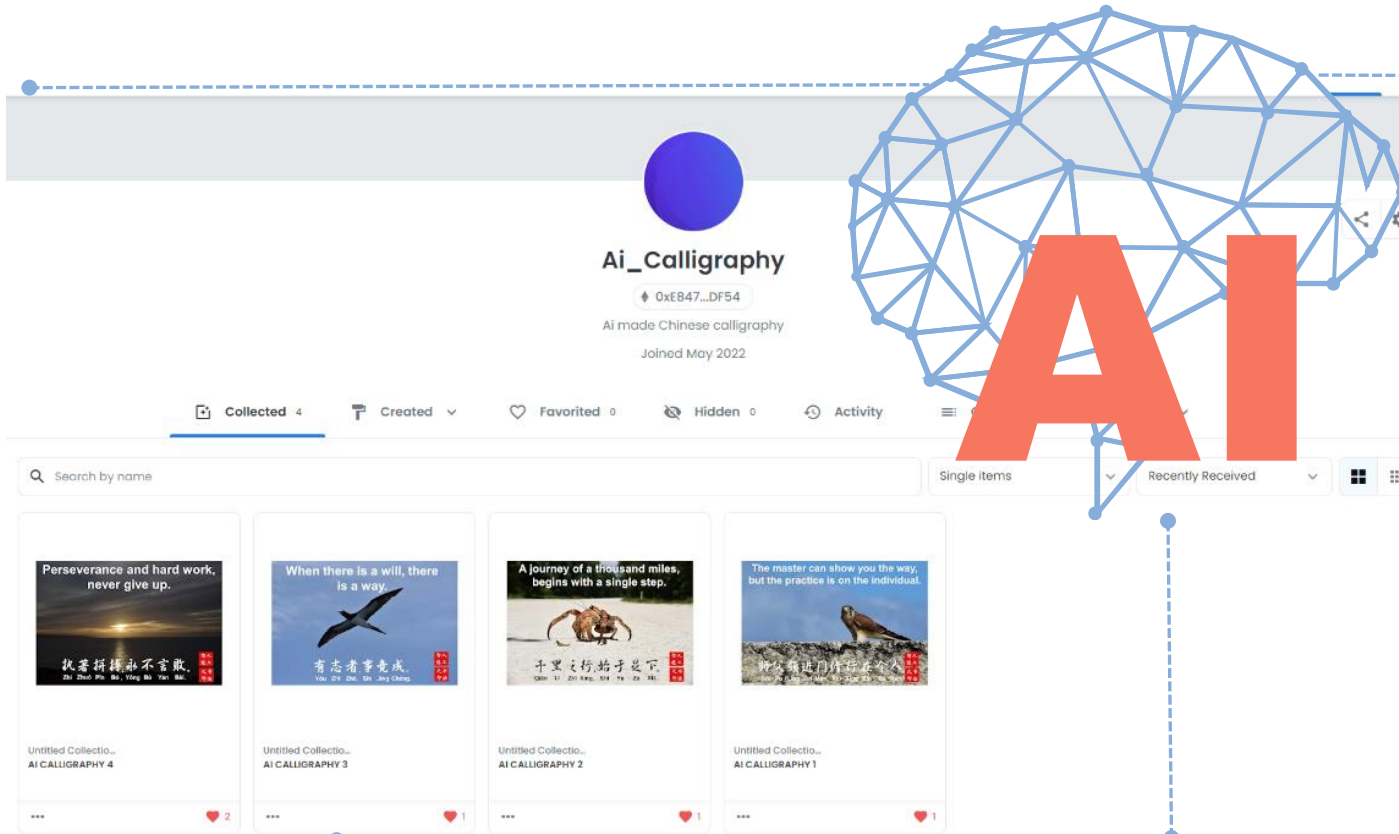
https://www.carousell.sg/u/ai_calligraphy/

Find us @ Facebook, Instagram and Carousell

9. Digital Store

Visit our store @ OpenSea

https://opensea.io/Ai_Calligraphy



Item
Digital Asset



Transaction
Blockchain



Payment
Cryptocurrency (ETH)



10. Existing Competitors

CALLIGRAPHY

Competitors:

- Freelance Calligraphers
- Etsy Chinese Calligraphy
- Art Prints

MOTIVATIONAL CARDS

Competitors:

- Lazada
- Shopee
- Any Online Stores



11. Our Strategy



Company Branding

- International Calligraphy Competition
- International Calligraphy Exhibition
- Calligraphy Galleries
- Educational Outreach



Customer Oriented

- Personalized Customization
- Exceptional Follow-up
- Aim for 5-Stars Reviews
- Customer Feedback
- Identify Customer Needs

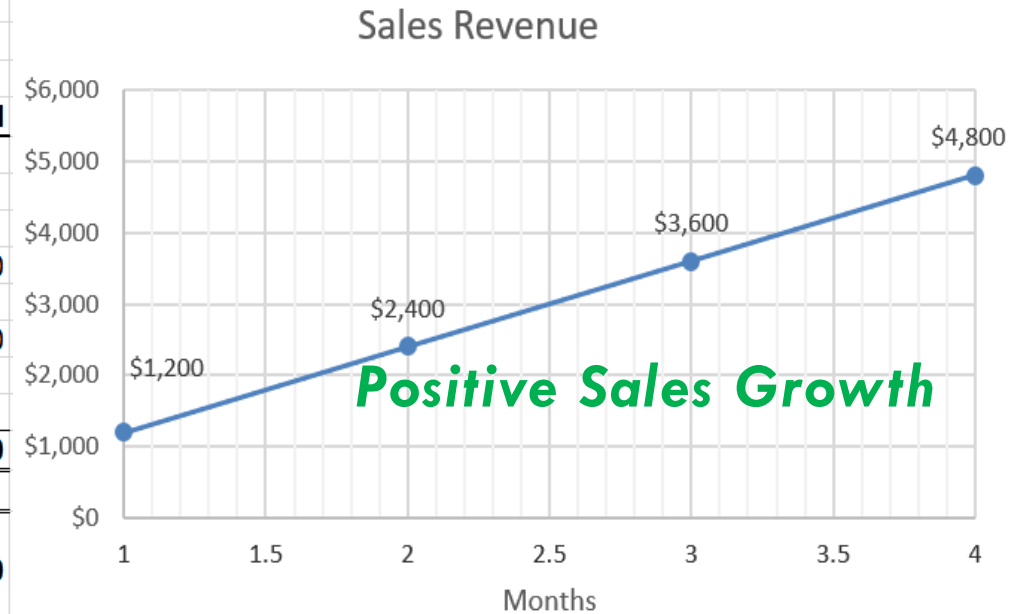


Attract Customer Base

- Life-time Membership (1st Purchase > \$50)
- Unlimited Refinement for 1st Purchase
- 15% Discount with Membership
- Expand Product Variety
- Free Shipping

12. Our Revenue Model

AI Memories Pte Ltd					
Sales & Cost of Goods Sold (COGS) Assumptions					
	Month 1	Month 2	Month 3	Month 4	Total
Estimated units sold for the month	20	40	60	80	200
Selling price per unit	\$60	\$60	\$60	\$60	\$60
Average Cost price per unit	\$30	\$30	\$30	\$30	\$30
Total Sales for the month	\$1,200	\$2,400	\$3,600	\$4,800	\$12,000
Total Cost of Goods Sold (COGS) for the month (Payment to Supplier)	\$600	\$1,200	\$1,800	\$2,400	\$6,000



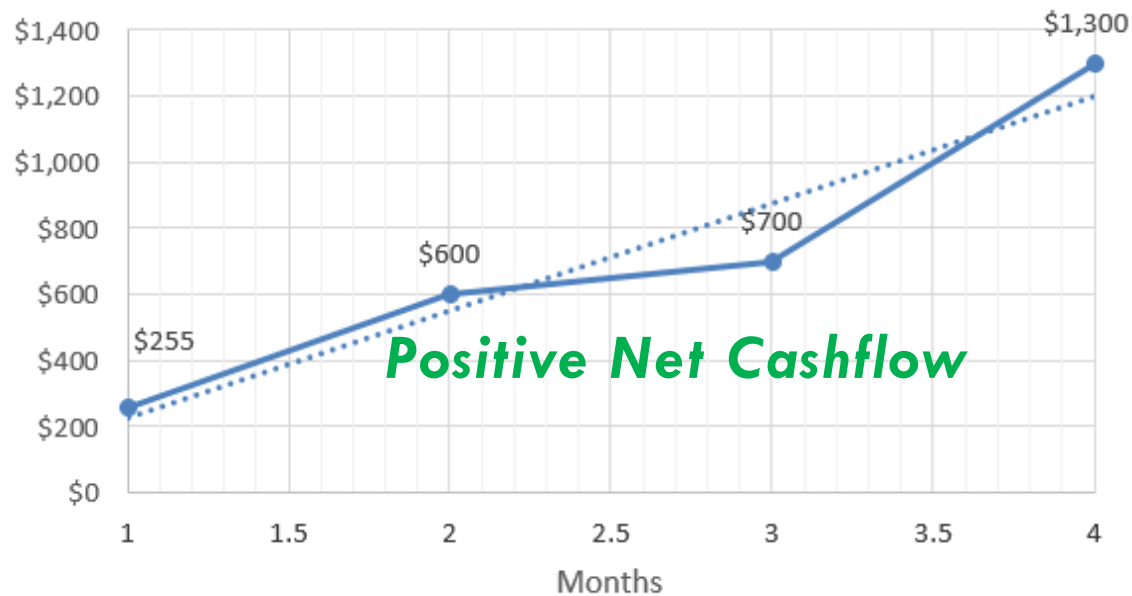
Breakdown of Material Costs:

Motivational Photo	Raw Material Cost	Motivational Mug	Raw Material Cost	Motivational Framed Photo	Raw Material Cost
4R Sheet + Ink	\$0.4 per unit	Printed Mug	\$17.9 per unit	A4 Print	\$7 per unit
				Frame	\$9.9 per unit
Total	\$0.4 per unit	Total	\$17.9 per unit	Total	\$16.9 per unit

A 13. Cashflow

Model

Net Cashflow = Cash Inflow - Cash Outflow

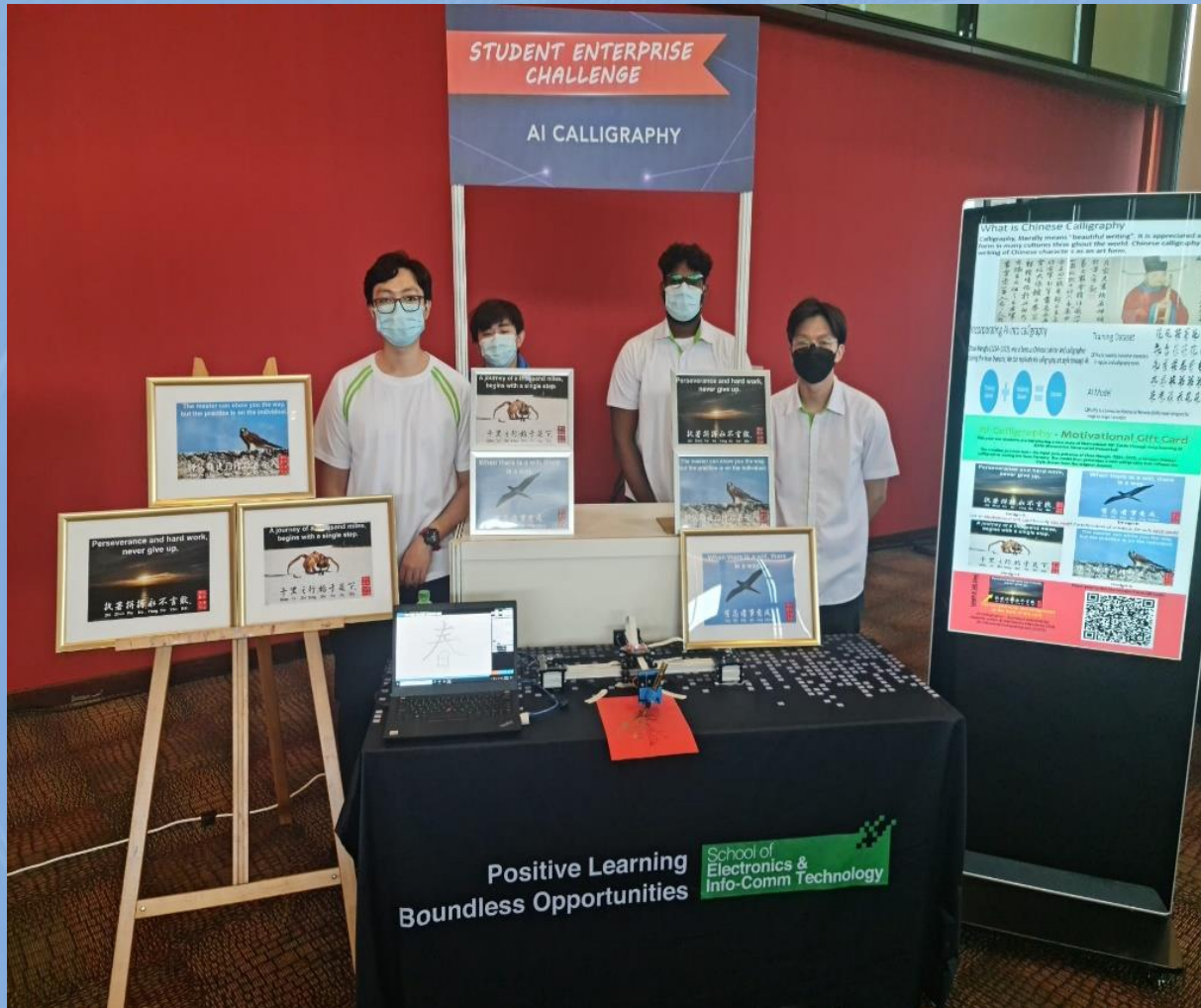


	Month 1	Month 2	Month 3	Month 4
Opening Cash Balance	0	255	855	1,555
CASH INFLOW				
Capital injection	3,000	1,000	500	500
Sales collection	600	1,800	3,000	4,200
Total Cash Inflow	3,600	2,800	3,500	4,700
CASH OUTFLOW				
A. CAPITAL EXPENDITURE				
Business Registration	245	-	-	-
Renovation	-	-	-	-
Purchase of equipment	500	-	-	-
Computer equipment	500	-	-	-
Store Rental Deposit	500	-	-	-
	1,745	-	-	-
B. COST OF GOODS SOLD				
Payment to Supplier	600	1,200	1,800	2,400
	600	1,200	1,800	2,400
C. OPERATING EXPENSES				
Store rental	200	200	200	200
Utilities	100	100	100	100
Internet and Phone	100	100	100	100
Advertisement	-	-	-	-
Salaries	500	500	500	500
Store supplies	100	100	100	100
Maintenance and Repairs	-	-	-	-
	1,000	1,000	1,000	1,000
Total Cash Outflow	3,345	2,200	2,800	3,400
Net Cashflow	255	600	700	1,300
Closing Cash Balance	255	855	1,555	2,855

Breakeven at Month 5

Positive Net Cashflow

14. Proven Track Record (Test Bed)



Total Profit:
\$717

Nov 2021 - Mar 2022

Student Enterprise Challenge Booth

14. Proven Track Record (Test Bed)

Student Enterprise Challenge



Competed against 6 Teams



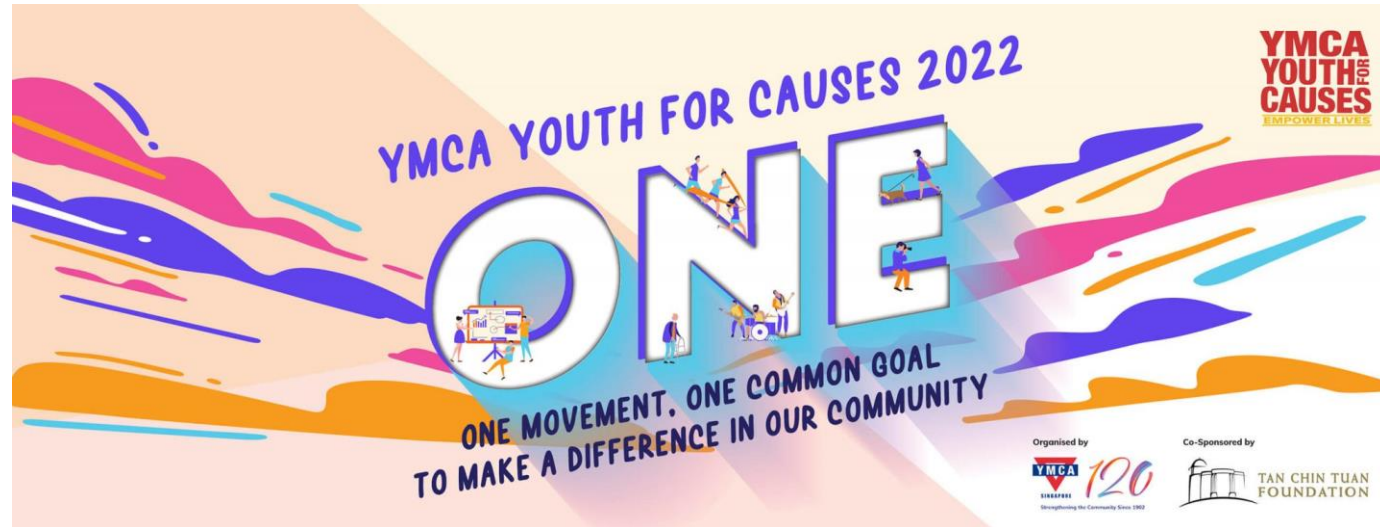
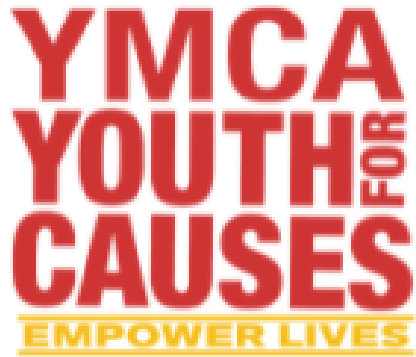
Won - 1st Prize

15. Public Outreach (Education)

Presented to Minister Of State Low Yen Ling about AI Calligraphy:



A 16. Champion a Social Cause (Fundraising)



\$1,200 Seed Funding



Chen Su Lan

Methodist Children's Home

Chen Su Lan Methodist Children's Home provides shelter, care and protection to boys and girls between the ages of 5 and 21 years old who come from low income, broken, dysfunctional or abusive families in Singapore.

<https://www.cslmch.org.sg/>

Our Target: \$10,000

PROJECT IDEAS

Initiate innovative and feasible ideas to raise public awareness & funds for your social cause in 15 weeks. Plan ahead, draw up all possible scenarios, work closely with your VWO, mentor & volunteers and implement it boldly!



谢谢

Thank You!

Q & A