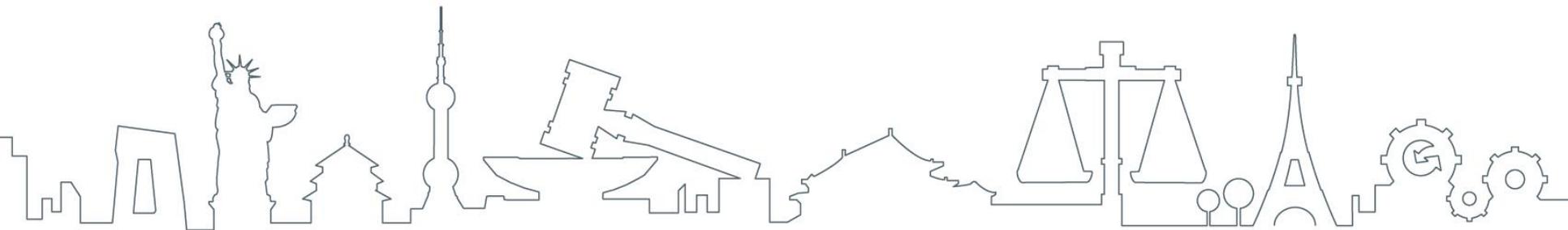


# AI in Trademarks

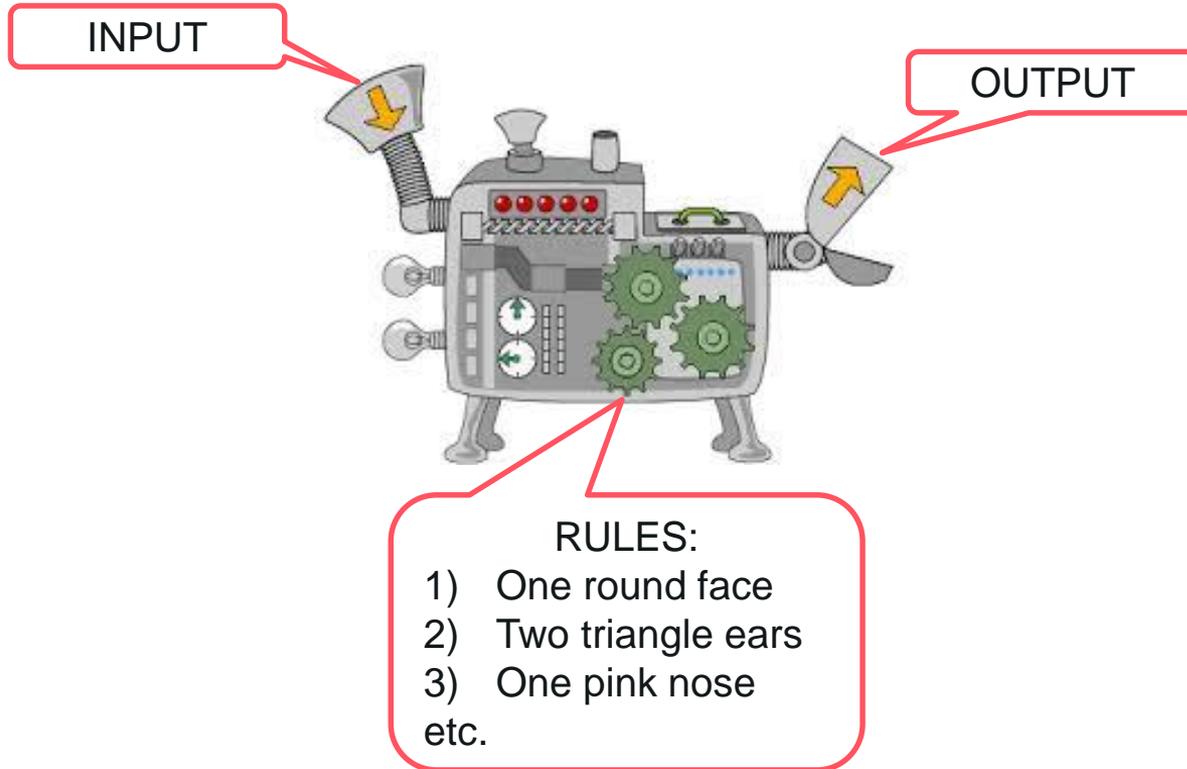
*Gloria Wu, 2018*



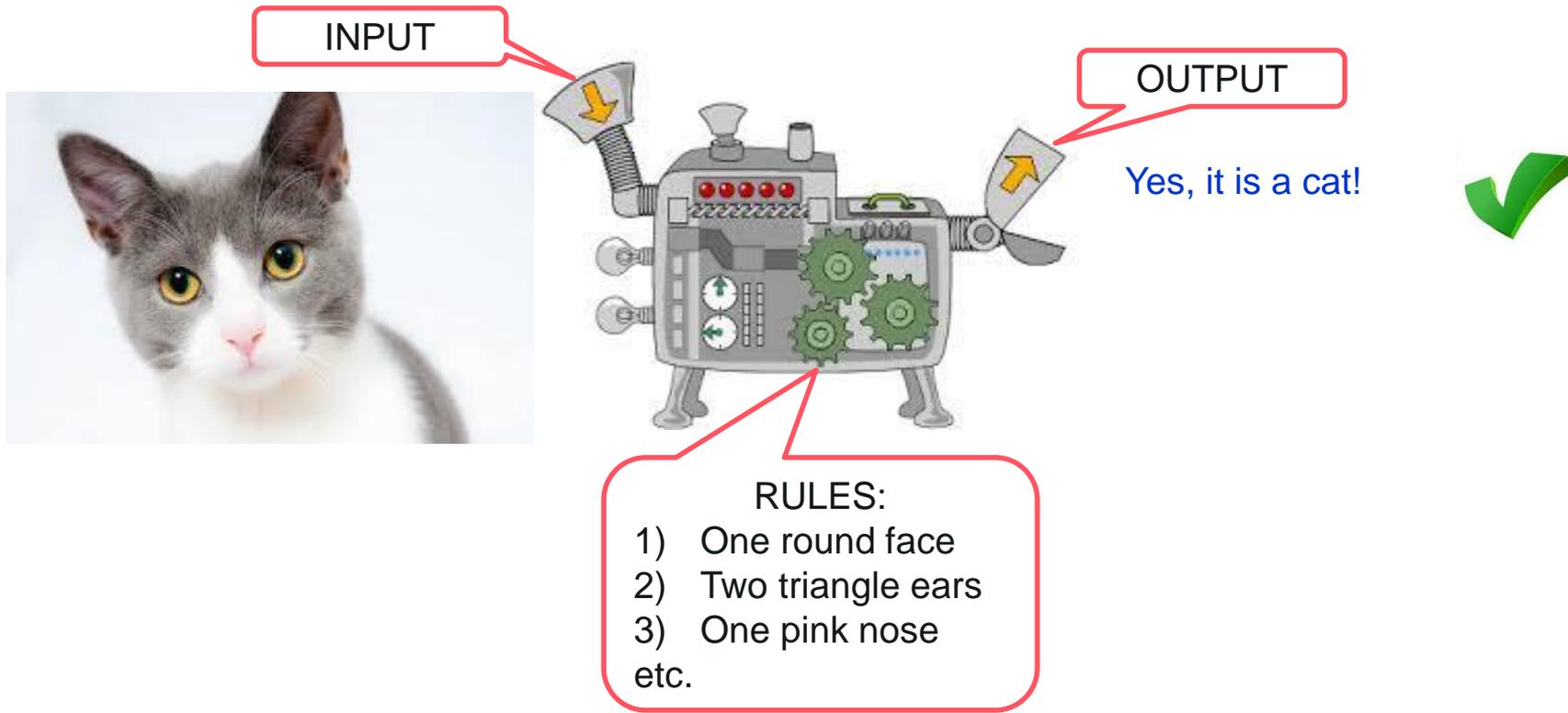
# Let's talk about "cat recognizer"!



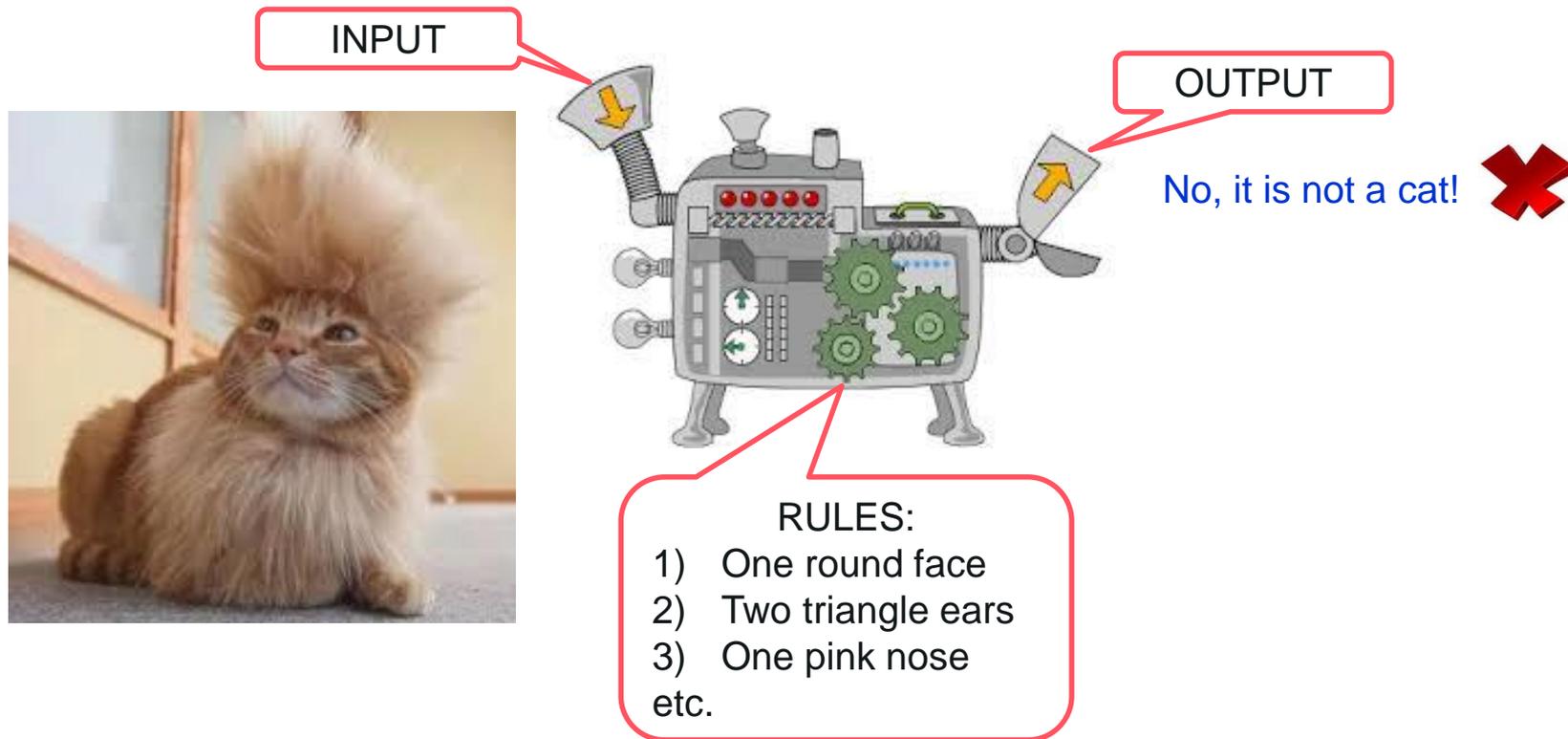
# Traditional Rule-Based Software



# Traditional Rule-Based Software



# Traditional Rule-Based Software



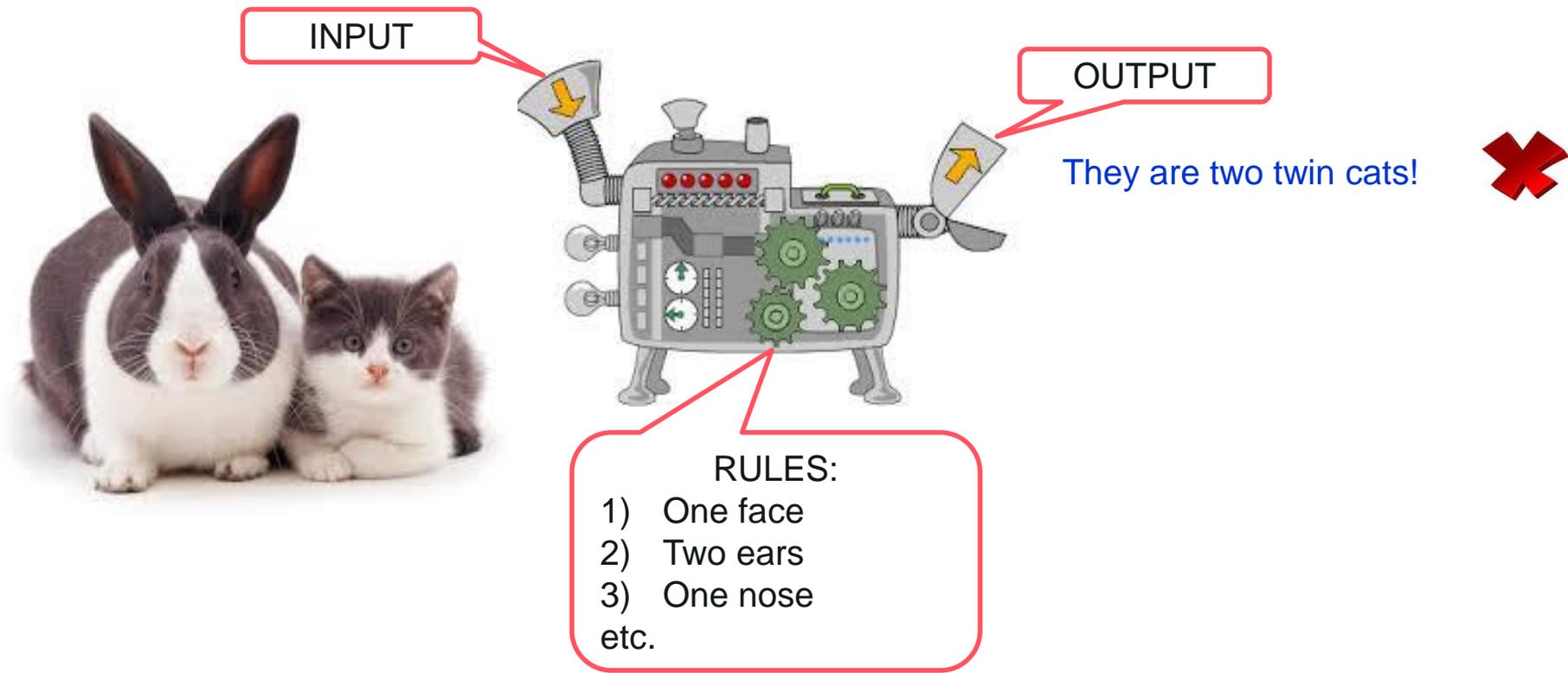
# eh... maybe the rules are too specific



Let's change to broader rules:

- 1) One ~~r~~ound face
- 2) Two ~~t~~riangle ears
- 3) One ~~p~~ink nose
- etc.

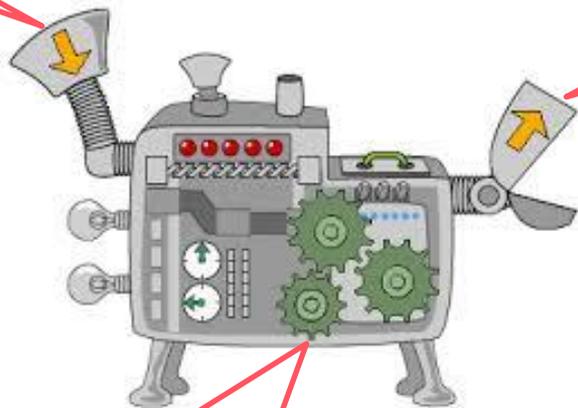
# Traditional Rule-Based Software



# Traditional Rule-Based Software

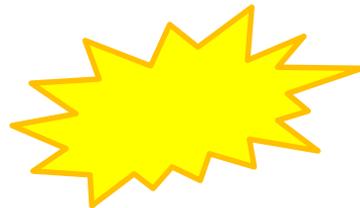


INPUT



OUTPUT

Are you kidding me?!



RULES:  
&#@^?!@#\$\$%^&()~\*

# So, what is the difference?

Human brain can learn from experience.

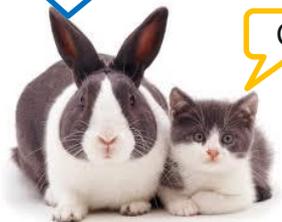


# Here comes AI...

- Step 1, we need big data (**experience**)

Not Cat

Cat



Not Cat



Not Cat



Cat



Cat



Not Cat



Cat



Not Cat



# AI Deep Learning

- Step 2, we need to train the model (**feed the robot**)

Big Data



# AI Deep Learning

- Step 3, test the result (magic happens!)



Oh, this is a cat

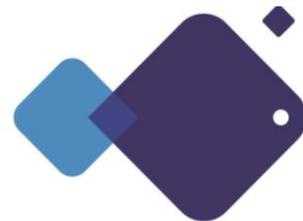
that is not a cat

# AI in Trademark Search



*Lanternfish*

— 蓝灯鱼 —



# Training the Machine to Find Similar Marks



- 1) Feature Recognition
- 2) Official Decisions
- 3) Test & Feedback



# Let's Search for Similar Marks to



# Step 1: Upload the Picture

Similar mark      App. No      Applicant's name

Mainland China      Please enter literal elements of the mark       Class      **Search**

Please upload a trademark specimen.  
< 2MB, JPG/PNG/GIF/TIFF  
For more accurate search result, resolution is better to be between 400x400px  
and 1500x1500px



Disclaimer: while every care has been taken in compiling and updating the trademark data, we do not make any representation as to the completeness, accuracy or up-to-date nature of the data. We do not accept any liability for any loss or damage arising directly or indirectly from reliance on any of the contents on this platform.

# Step 2: Select the Class(es)

Similar mark      App. No      Applicant's name

Mainland China      Please enter literal elements of the mark      Class      Search

15 Musical instruments	16 Office supplies, teaching materials
17 Plastic and rubber products	18 Leather products
19 Non-metallic building materials	20 Furnitures, containers, bone and horn
21 Household and kitchen utensils	22 Ropes, nets, tents, canvas
23 Yarns and threads for textile use	24 Textile for daily use
25 Clothing, footwear, headgear	26 Lace, embroidery, false hair
27 Carpet, mats, wallpaper	28 Games and toys
29 Cooked vegetables/fruits, meat/egg/cream	30 Coffee, pastry, condiments
31 Fresh fruit, vegetables, flowers	32 Beer, beverages, syrups

Select All      Confirm

ables, flowers

Opposition      Registered      Invalid      Other

# Step 3: Click “Search”

Similar mark      App. No      Applicant's name

Mainland China      Please enter literal elements of the mark       Class      **Search**



**Search results**

Class      16 Office supplies, teaching materials      31 Fresh fruit, vegetables, flowers

Degree of similarity      High      Medium      Low

Status      Pending application      Preliminary published      Pending opposition      Registered      Invalid      Other

# Here are the search results

**KANGXIN**

- Quick Search
- Advanced Search
- Mainland China Application
- Hong Kong Application
- Trademark Renewal
- New Cases
- Case Status
- Official Documents
- Debit Notes
- Applicant's Information
- Mailing Address
- Account Information
- Security Settings
- Notifications

Similar mark
App. No
Applicant's name
Advanced Search

Mainland China

Class
Search

**Search results**

Class

Degree of similarity

Status

Analysis of availability of registration
Download search report

Total 101
< 1 2 3 4 5 6 >
Go to page 1

Trademark	Applicant's name	Applicant's address	App. No.	Class	Goods/Services	Filing Date	Reg. Date	Status	Degree of similarity
	Li Chuhong	No. 7, Yi Xiang, Highway Wai, Eas...	16447227	16	Paper,Carbon paper,Toilet paper / Hygienic pa...	2015-03-06		Invalid	high
	Paper Plastic Arts &mp; ...	Cai Tang Jin Si Cun, Chaoan Cou...	9410716	16	Toilet paper / Hygienic paper,Baby diapers of p...	2011-05-03	2012-05-21	Registered	high
	Paper Plastic Arts &mp; ...	Cai Tang Jin Si Cun, Chaoan Cou...	9222096	16	Toilet paper / Hygienic paper,Baby diapers of p...	2011-03-17	2012-03-21	Registered	high
	Huanian Minghui Mining Te...	Chengji Town, Lianshui County, H...	21954630	31	Live animals,Fruit, fresh,Vegetables, fresh,Catt...	2016-11-16	2016-02-07	Registered	medium
	Zhang Shengjian	Bihu rose garden, central city, Lon...	9258307	16	Toilet paper / Hygienic paper,Makeup remover,...	2011-03-25		Invalid	medium
	CCTV Animation Co., Ltd.	10 floor, Ge Hua building, 1 Qingli...	18735669	16	Drawing materials,Drawing instruments,Office r...	2015-12-29	2017-02-07	Registered	medium
	Zhang Shengjian	Bihu rose garden, central city, Lon...	8437641	16	Toilet paper / Hygienic paper,Makeup remover,...	2010-06-30		Invalid	medium
	Suzhou Yile Paper Co., Ltd.	298 Luzheng Lianyi road, Wuzhon...	10869358	16	Paper,Copying paper (stationery),Toilet paper / ...	2012-05-04		Invalid	medium
	Chaoan Caitang Gaoming ...	Cai Tang Jin Si Cun, Chaoan Cou...	11492222	16	Towels of paper,Handkerchiefs of paper,Printe...	2012-09-14	2014-02-21	Registered	medium

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# How to Further Improve



- Bigger data with good quality
- More test & feedback by trademark professionals

# What Else Can AI Do for Trademark



- Prediction of case results (registration, opposition, invalidation)
  - distinctiveness?
  - reputation?
  - bad faith?
  - likelihood of confusion?

# What Else Can AI Do for Trademark



- Logo Design
  - if my logo cannot be registered due to prior marks, how should I revise it to overcome?
  - or maybe, design a fresh new logo

**Thank you!**





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