

Concept D

Drawing pad NB concepts

Quick user feedback

Oct . 2019

1.Drawing pad user deep dive

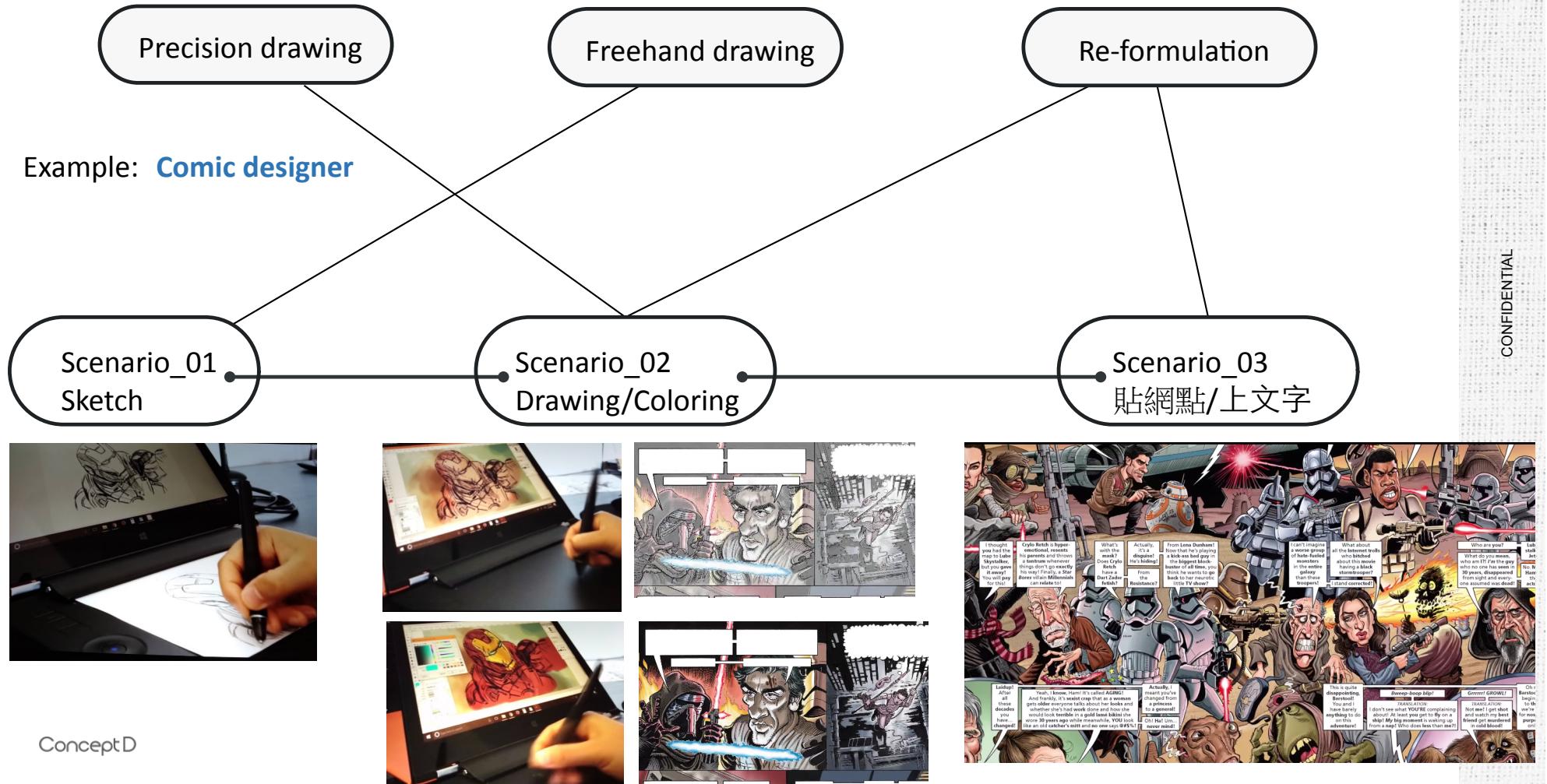
3.Drawing pad user work scenario

Generic working process

Current drawing pad usage & scenario

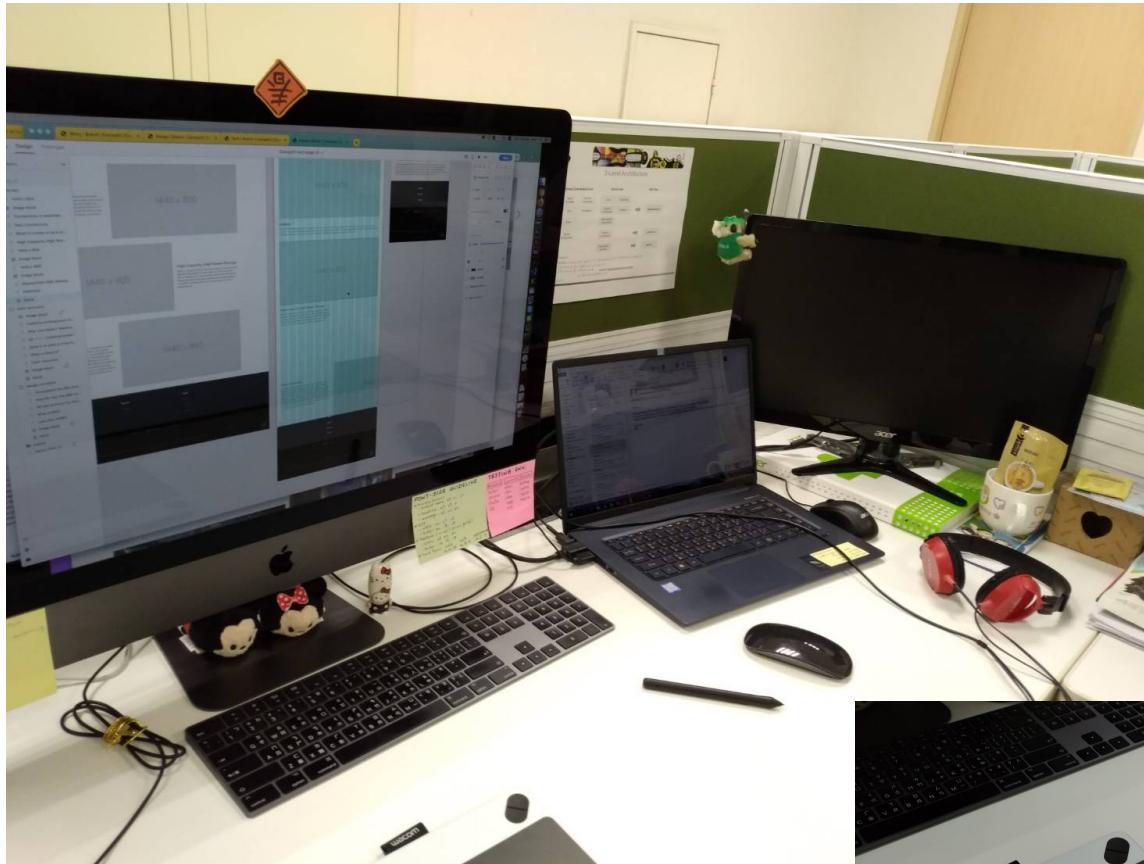
3. Concepts evaluation

Drawing pad user Journey





Web Designer
Miky
6 yrs
Acer Inc.



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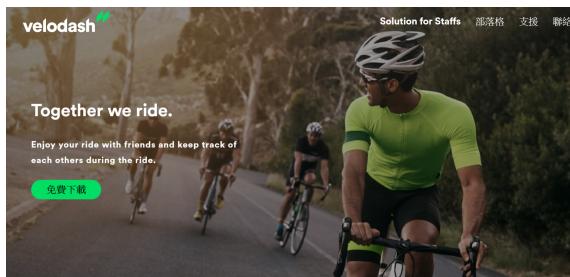


UI Designer/
Illustrator

Yuan Yuan

2 yrs

Bike App



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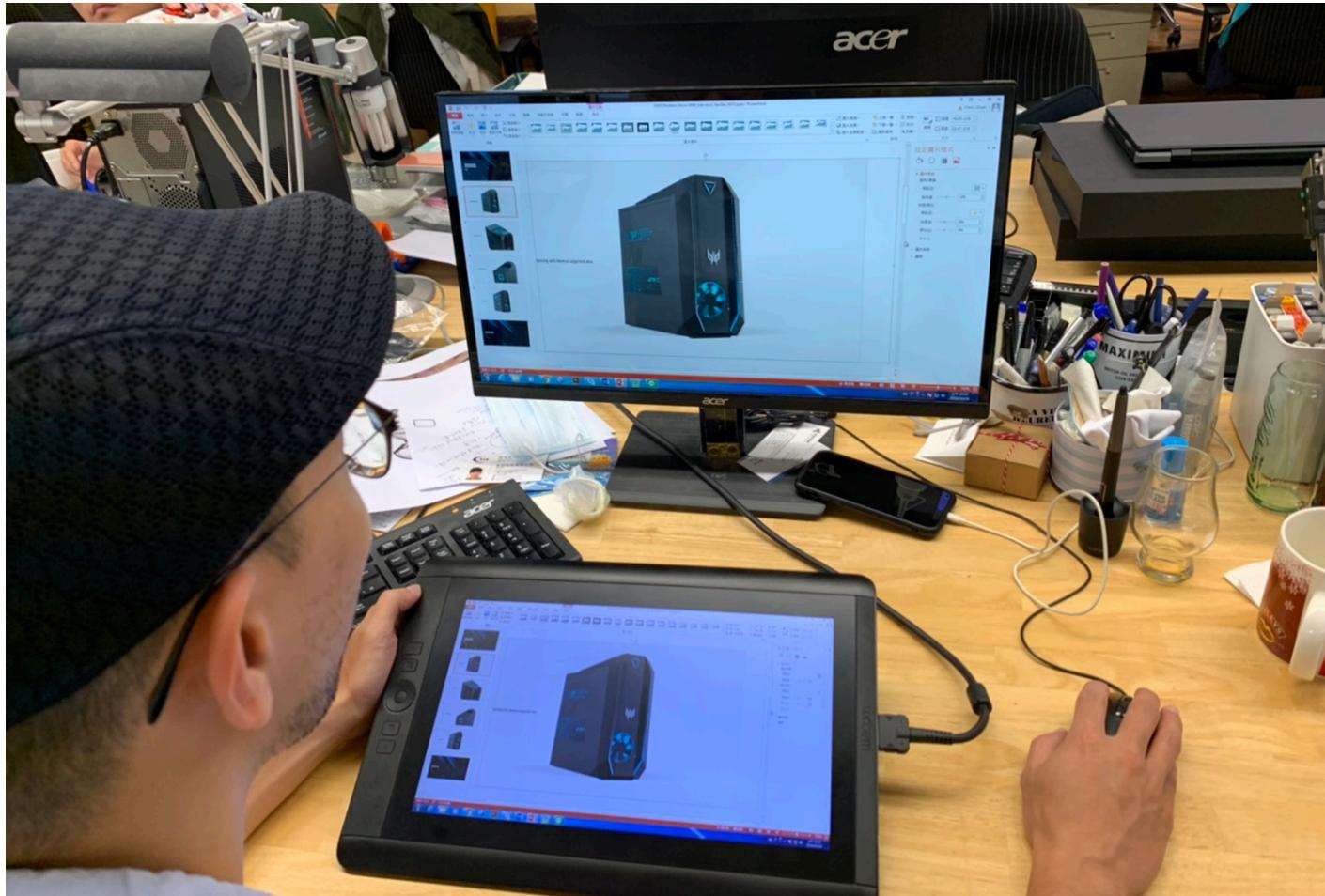


ID Designer

Oliver

10 yrs

Acer Inc.



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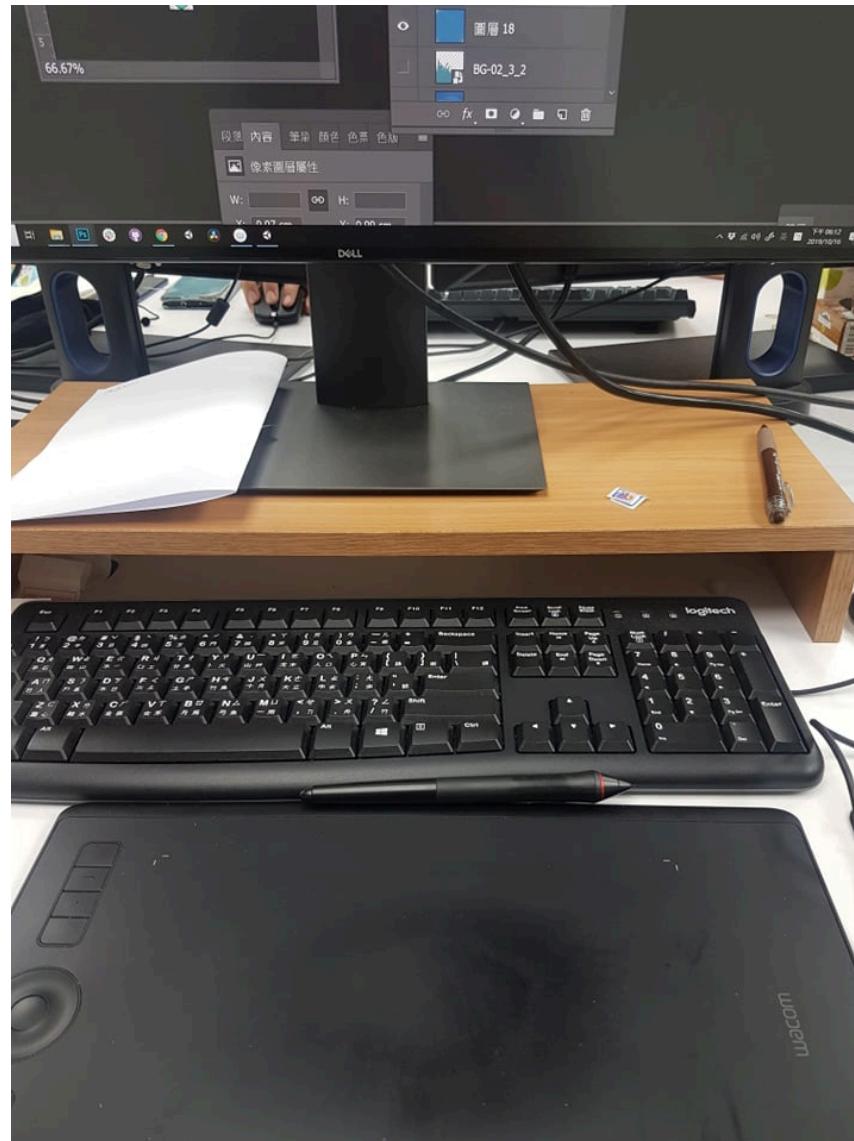
Animator

Peggy

9 yrs

維京遊戲

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Workflow overview

	Initiate	Prepare	Design	Validate
ID	Background understanding	Conception: brainstorm Mood board sketch(draft)	sketch → 3D model → Render → Refine 2D	
UI		Conception: brainstorm research	Information architect → UI flow → Wireframe → Mockup	
Web	Kick-off Briefing	Data/ reference collection	wireframe → mockup → Develop	Testing
Ani- mator	Planning	Consolidate style	UI/ visual items → Integration → animation → program	
	ConceptD			

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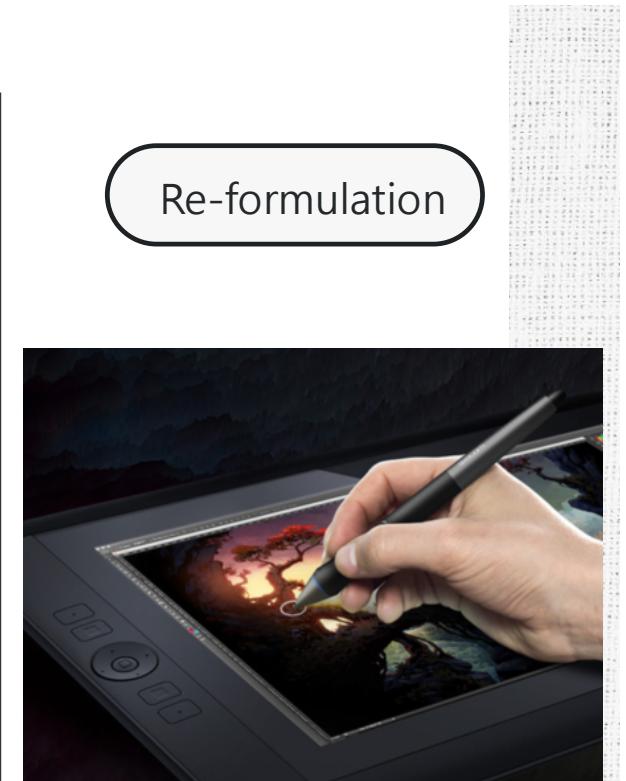
Precision drawing



Freehand drawing



Re-formulation





ID Designer

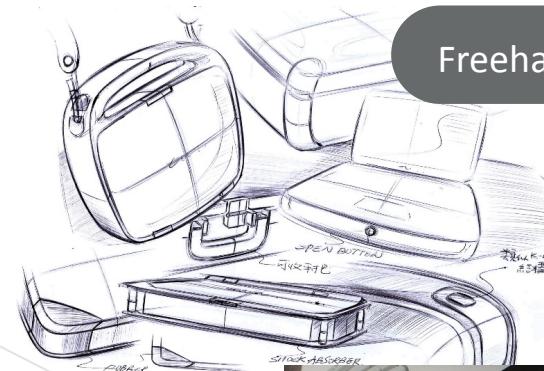
Design Journey

Sketch

3D modeling

Rendering

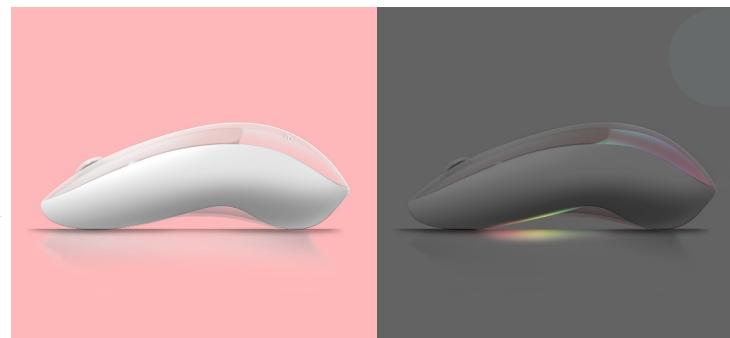
2D Refine



Freehand drawing



Freehand drawing



Re-formulation

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ID Designer

“用了有螢幕的就回不去板子了”

- 1. 直覺
- 2. 線條更精準，減少錯誤率

“喜歡用A4 size以上的繪圖板原因是產品細節繪製時手部能自由揮灑”

“螢幕與繪圖板的大小希望是1:1”

“如果任務超過兩個小時就寧可選擇有效率的配備與場景完成工作”

Finding:

1. 戶外繪圖的情況下**會考慮適合出去繪製的任務與時間**否則會考慮換有效率的環境與設備完成任務
2. 習慣大面積揮灑的繪圖方式 **偏好大板子**
3. **有螢幕**的板子讓自己工作有效率



UI Designer

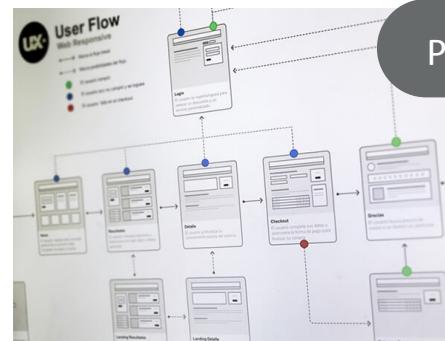
Design Journey

Information architect

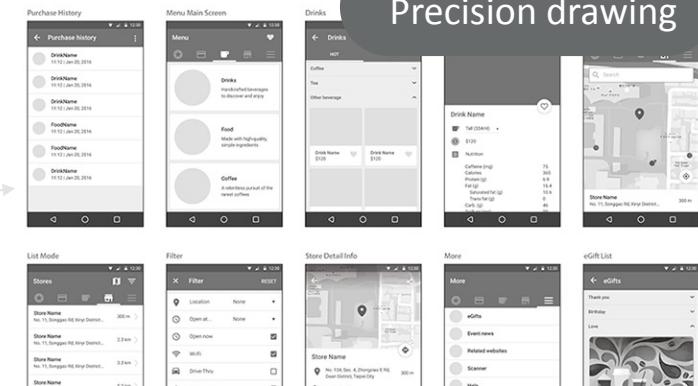
UI flow

Wireframe

Mockup

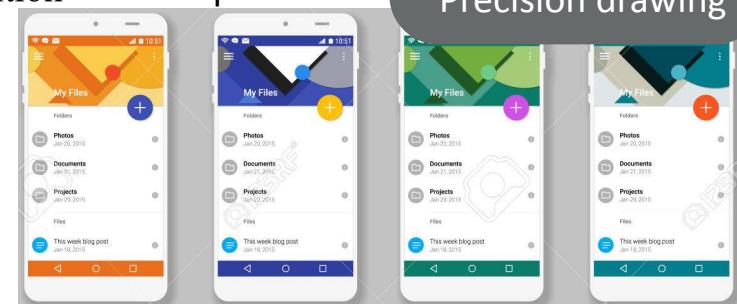


Precision drawing



Precision drawing

Position and size precision



Precision drawing

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UI Designer

“板子的大小對我畫圖影響不大 熟能生巧 ”

“用 PS(freehand) 自由度高 能自由加減線條
再進入Ai做精準的繪製 ”

“繪圖板上的硬體鍵我不需要 也沒有花時間去了解
只有用到 開啟/關閉 手指觸控的按鈕 ”

“iPad 還不能取代我的繪圖板 因為快捷鍵不同 對手勢還不熟
悉”

(purchased 2wks ago)

Finding:

1.板子的大小不影響繪圖

2.新的設計希望能與自己使用習慣相近(筆壓/筆速) **無痛轉移**

ConceptD



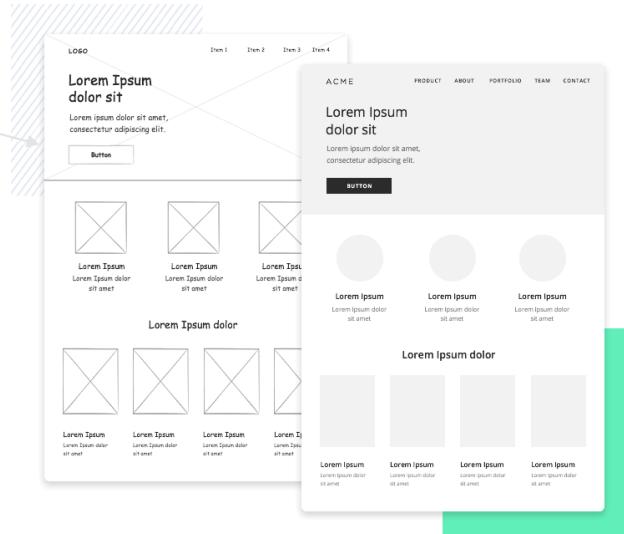
Web Designer

Design Journey

Wireframe

Mockup

Position and size precision



Precision drawing



Precision drawing

ConceptD

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Web Designer

“因為用滑鼠手腕會不舒服 所以用筆來畫圖 ”

“雖然我的板子有一個段差
但因為便宜 用久也習慣了”

“我的板子太小 會需要來來回回拖曳 ”

Finding:

- 1.戶外繪圖的情況下**把筆當滑鼠使用**比較多點選拖曳的動作
- 2.偏好**大板子**

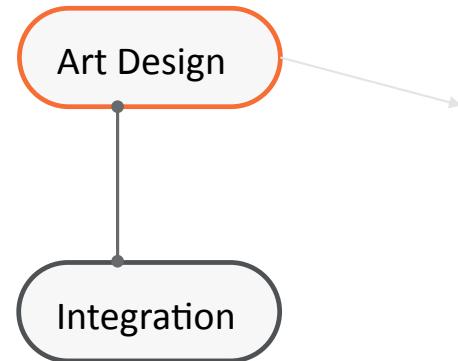
ConceptD





Animator

Design Journey



Precision drawing

ConceptD

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Animator

“用滑鼠沒辦法畫圖 手會很痛”

“筆有感壓 畫出來的線條有粗細比較美”

“能趕快把圖畫完 很重要”

“喜歡螢幕與手繪板1:1”

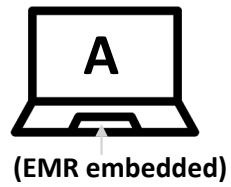
“喜歡功能單純的東西 感覺
很多功能會容易壞掉”

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Finding:

1. 習慣使用6x8 wacom 喜歡繪圖板與螢幕1:1
2. 不使用繪圖板上的快捷鍵 因為鍵盤的快捷鍵比較多操作也較方便
3. 手繪板與螢幕排放成一直線

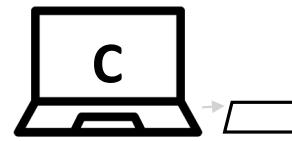
Proposal evaluation



(EMR embedded)



(drawing pad detachable)



(store into system)



(pad + display)



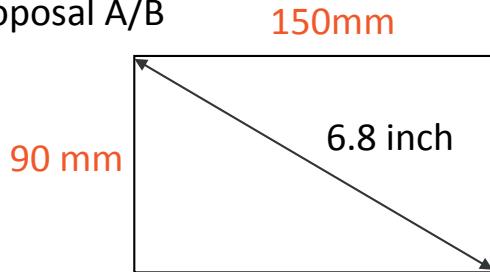
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Drawing Pad size

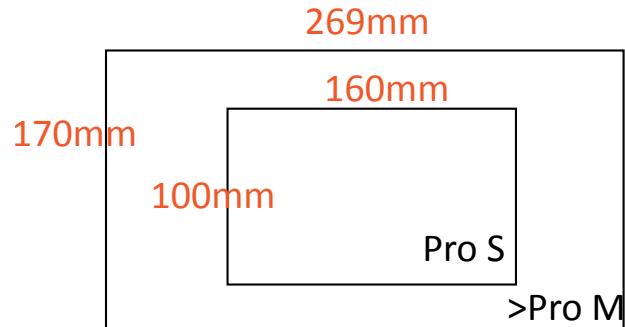
[TouchPad]

Proposal A/B



Proposal C

[Insert-system]



ConceptD

Wacom-intuos-pro



[NEW Wacom Intuos Pro S](#)

269 x 170 x 8 mm / 10.6 x 6.7 x 0.3 in
Wacom Pro Pen 2
8,192 pen pressure levels
6 ExpressKeys™
Built-in Bluetooth connectivity

[Shop now](#)



[Wacom Intuos Pro M](#)

338 x 219 x 8 mm / 13.2 x 8.5 x 0.3 in
Wacom Pro Pen 2
8,192 pen pressure levels
8 ExpressKeys™
Built-in Bluetooth connectivity

[Shop now](#)



[Wacom Intuos Pro L](#)

430 x 287 x 8 mm / 16.8 x 11.2 x 0.3 in
Wacom Pro Pen 2
8,192 pen pressure levels
8 ExpressKeys™
Built-in Bluetooth connectivity

[Shop now](#)

Push your creativity to the edges

With the active drawing area stretching edge to edge you have more room on your desk and more room to create.

- 7 inch active area (Small sizes), 10 inch (Medium sizes)
- More than 75% of tablet width is active area
- 100 lines per mm recognition of pen on tablet (tablet density)

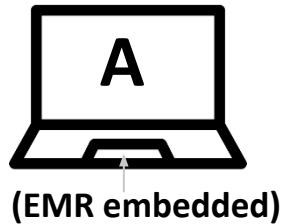


Proposal A: Integrate EMR drawing pad on TP area



An integrated drawing
pad

Proposal A: Integrate EMR drawing pad on TP area



Expected to be used create accurate drawing & replace some mouse control (frequent clicks)



Minimum overall design impact



Effortless, won't forget to carry



Very useful for tasks involve heavy mouse

“~~需要~~可以做簡單的事，拉貝茲、噴槍上色
(頻繁點左鍵手會痛)”



“對向量型作圖很有用”



Pad location interfere with quick key control



“段差可能會影響精細插畫風格的作畫”

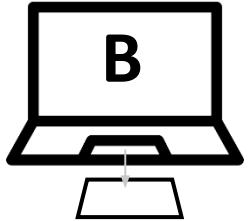


“板子太小，移動游標要來回好幾次”



“板子小，效率太慢不會考慮”

Proposal B: detachable EMR drawing pad on TP area



(drawing pad detachable)

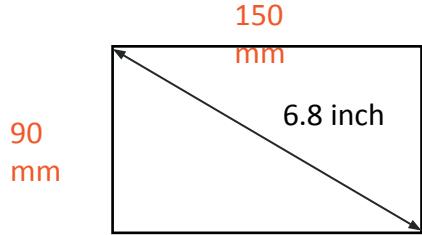
With A, user is closer to laptop



“操作Quick key手會卡在TP位置的凹槽”

Concept D

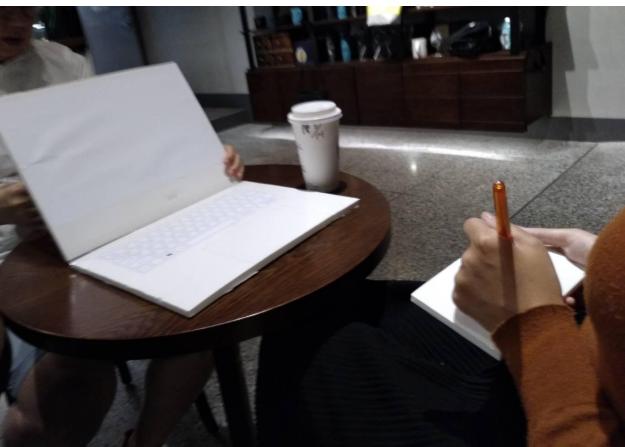
Not better than A, but more side-effects



“段差的問題更嚴重”

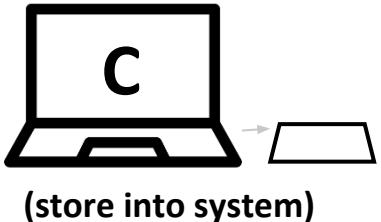


“(很新奇)好像沒有這樣的需要”



“離螢幕遠一點還不錯”

Proposal C: detachable drawing pad stored into system



**Not use drawing pad every time,
but need to carry it all the time**



“跟我現在用的尺寸一樣，可以無痛地轉移”
“不是每次帶筆電都會用繪圖板，所以變重就不願意”



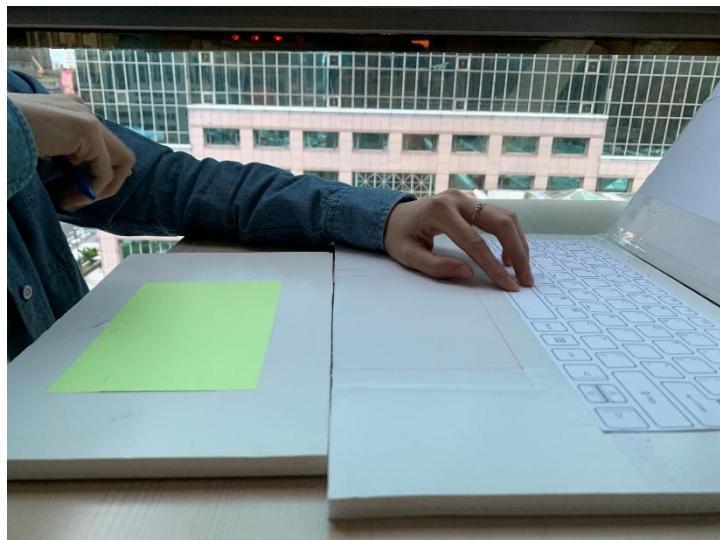
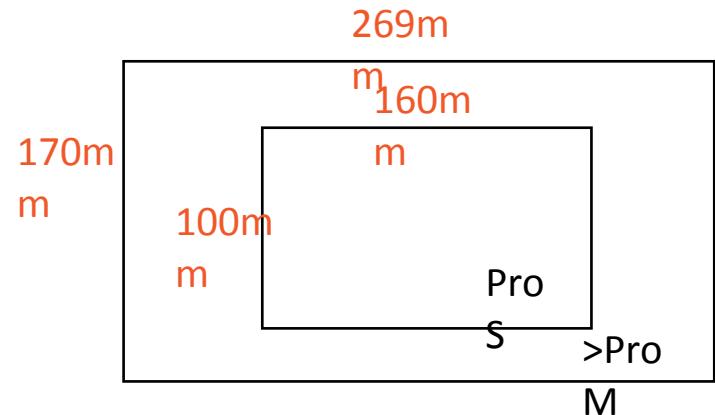
“手要伸得比較長”(板子不會和筆電並置)



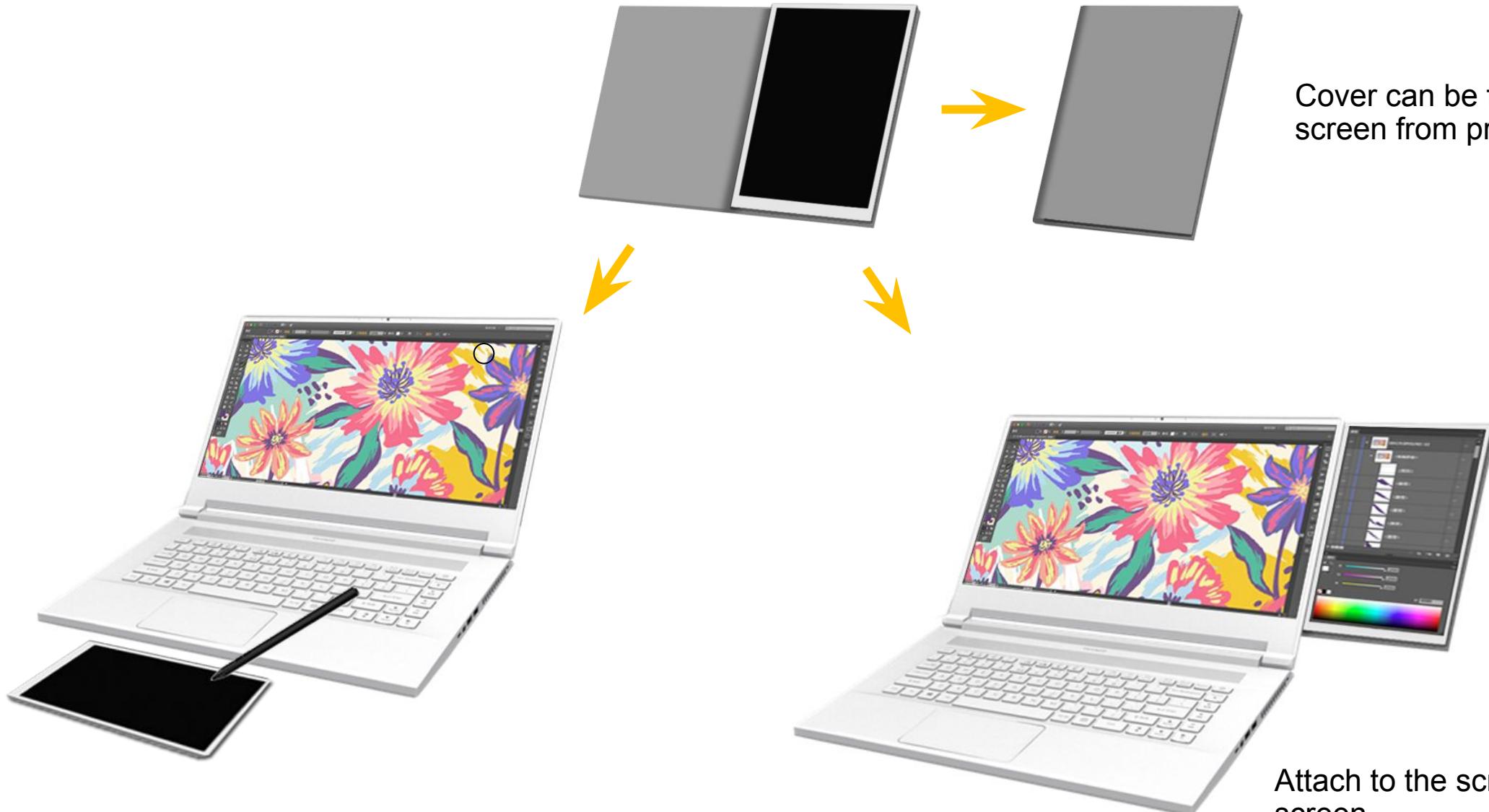
“可以有Mode A/Mode B切換兩種大小，需要用到邊緣
就切換到小板有置手的空間”



“如果出國就會很想要(替代桌機和板子)，通常用電腦
就會用到繪圖板”



Proposal D: An accessory as a 2nd touchscreen and a drawing pad



Detach as a drawing pad
(wire or wireless need further discuss)

Cover can be folded to protect screen from pressure or scratch

Proposal D: An accessory as a 2nd touchscreen and a drawing pad

Precision
drawing

Handy tool bar at the side for more convenience



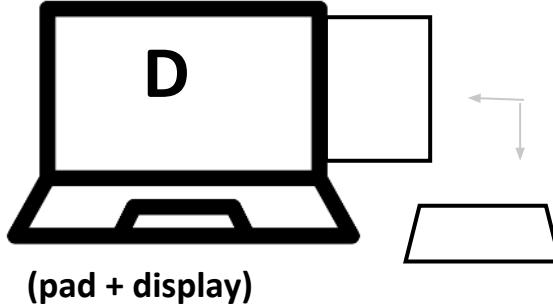
Freehand
drawing



Re-formulatio
n

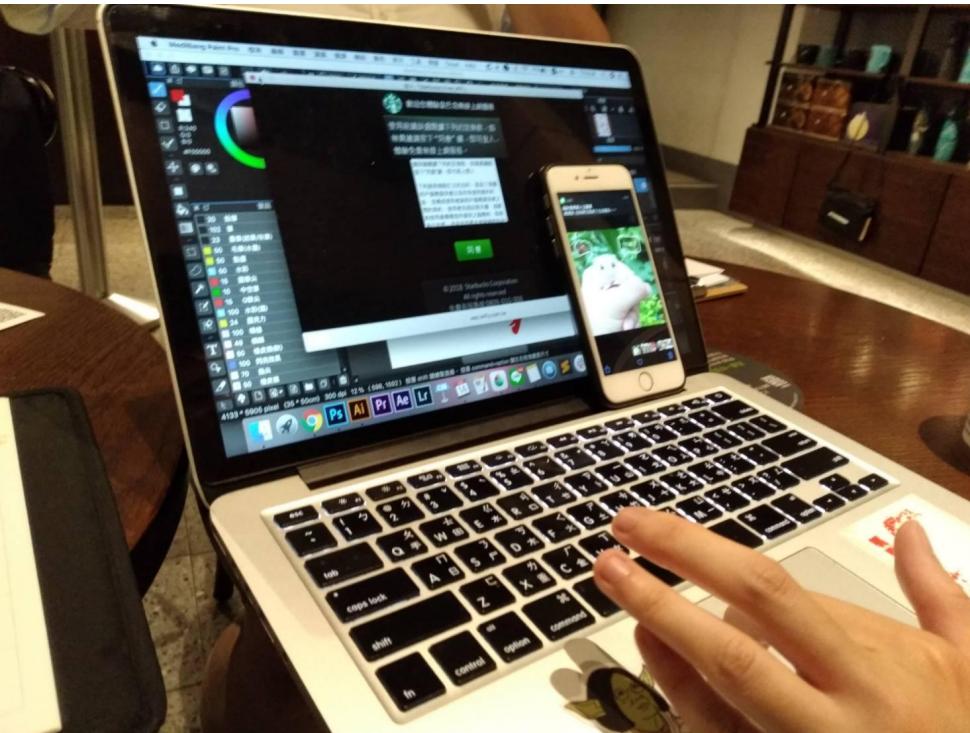


Proposal D: An accessory as a 2nd touchscreen and a drawing pad



Perceived as high value

Match current scenario



Cool, innovative; 2nd display is very useful



“很適合商談時，現場改圖給客戶，翻轉讓對面的人看螢幕
(不用全部都給人家看)”
“希望螢幕可以調角度(視角更好)”

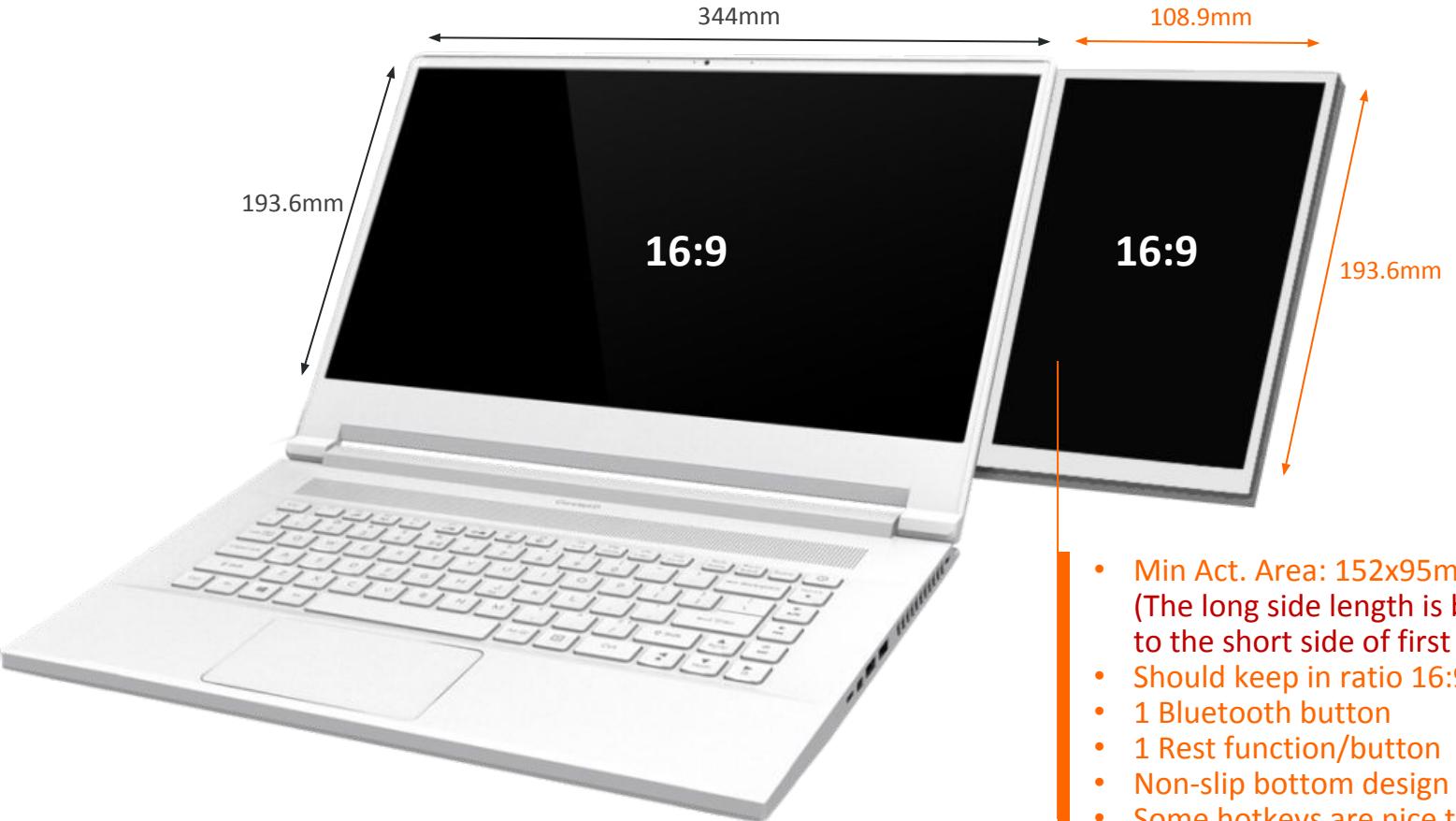


無法繪圖板、延伸螢幕同時用”



‘很花俏但用不到螢幕，跟市售的Wacom沒差’

2nd Display Screen Size & Spec Suggestion



- Min Act. Area: 152x95mm
(The long side length is better to be equal to the short side of first implanted screen)
- Should keep in ratio 16:9
- 1 Bluetooth button
- 1 Rest function/button
- Non-slip bottom design
- Some hotkeys are nice to have
(e.g. slider for zoom in/out or stroke size)

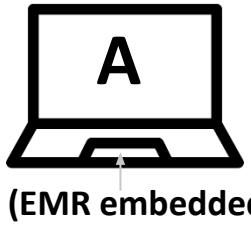
CTL-4100 (Wacom min)



- Bezel at least 24mm
- Slim in around 4mm at palm rest side
- 4 hotkeys on panel, 2 hotkeys on stylus
- 4096 pressure levels
- No multi-touch
- Wire ver. 230 g, wireless ver. 250 g
- Stylus: 11.2g with 3 tips in stylus
- 1 Type A (L head) to USB: 1.5m
- Battery last for 15 hrs, full recharge up to 3.5 hrs
- Speed 133 pps 筆尖讀取速度
- 7mm 低讀取高度
- With 3 free drawing softwares

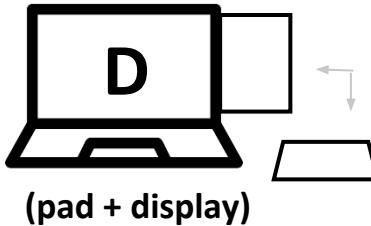
Proposal preference by participants ranking

1



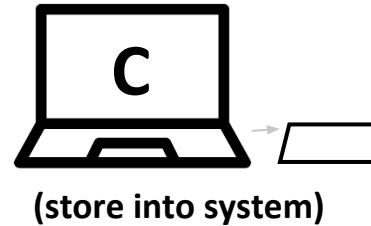
(EMR embedded)

2



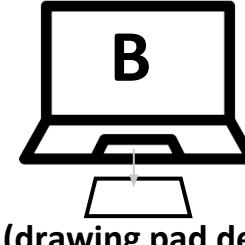
(pad + display)

3



(store into system)

4

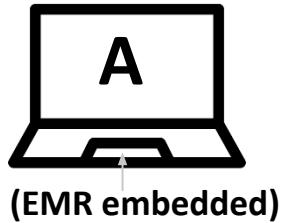


(drawing pad detachable)

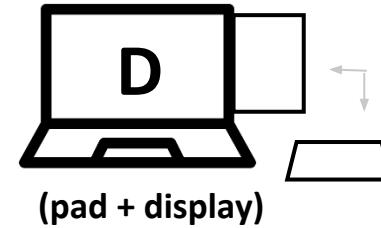


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- Minimum side effect, but provide a useful pad for precision drawing, repeating mouse click operation
Free hand sketch depends on drawing content
- Reduce carry burden



- Fancy idea; premium feeling
- Portable 2nd display straight-forward fit into user's current scenario
Ex. Drawing reference
wireframe preview
bowser comparison
email

Other findings

- 觸控筆並不是單獨使用，而是搭配鍵盤、**滑鼠**
- 轉換時，能調整到習慣的感壓，筆速等參數很重要
- 螢幕、繪圖板 尺寸接近1:1 是最高效率的組合，但也受個人習慣、訓練、繪畫內容而異
- 截至目前，未發現偏好使用繪圖板上快捷鍵使用者
(僅使用單一功能，如touch on/off)



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Let creators be creators

ConceptD