

感與知

培育 AI 時代的科技人才

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趨勢科技

- 願景：建立安全的資訊交換世界
- 專注資安領域逾 30年
- 日本上市，日經指數成分股
- 營收逾15億美金，自創業至今均維持獲利
- 全球保護超過500,000家企業客戶
- 6800位員工，遍佈65個國家
- 致力資安教育、善盡社會責任



全球佈局搜集在地情資，防護新型態威脅



■ 趨勢科技資安威脅研究中心

■ 近期網路犯罪地下經濟研究區域

Our Vision: A World SAFE for Exchanging Information

營運策略

掌握 IT 架構、使用者行為與資安威脅，



攻敵制勝之道 ~ 感知情勢、快速變陣

Water shapes its course according to the nature of the ground over which it flows; the soldier works out his victory in relation to the foe whom he is facing.

Therefore, just as water retains no constant shape, so in warfare there are no constant conditions.

夫兵形象水，水之形，避高而趨下：兵之形，避實而擊虛；水因地而制流，兵因敵而制勝。故兵無常勢，水無常形；能因敵變化而取勝，謂之神。

病 毒

- Sun Tzu, The Art of War



面對威脅變化的致勝之道

Execution Success

$y = \text{quick } (q) + \text{accurate } (a) - \text{negative outcomes } (n)$

$$y = q + a - n$$



Cybersecurity Strategy

$x =$ anticipate shifts in infrastructure (i) + embrace changes in user behavior (u) - remove cybersecurity threats (t)

$$x = i + u - t$$

COVID-19 疫情加速資安威脅升溫



2020年二至三月，垃圾郵件
月增**220倍**



2020年二至三月，惡意
網址月增**260%**

因應遠距工作需求，IT
基礎架構快速轉變、回
應速度與更大彈性的需
求激增。

需審慎提防以疫情為餌
的攻擊！

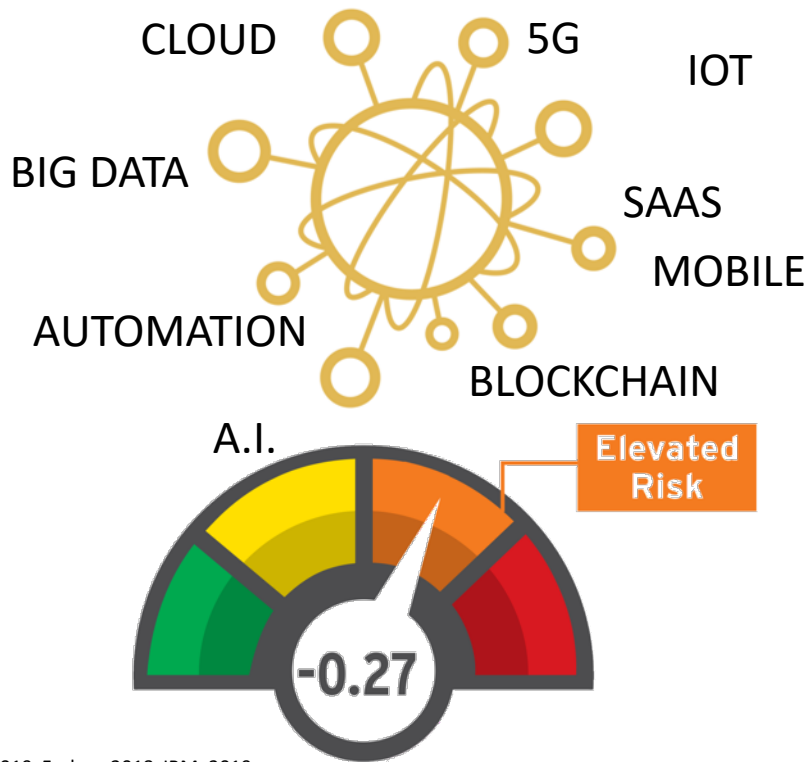
創新技術帶來連網世界的轉變



可預防95% 藥物不良
反應事件的發生



美國在5年內將有
25% 的購物中心
會消失！



2020 年行動支付金額
將超過一兆美元！



計畫性停電的次
數可減少 50%！

持續30年的資安困擾

RCA 根因分析

威脅從何而來？

WHY

WHERE

WHAT



潛伏時間

為何無法及早得知？

受駭範圍

受影響範圍為何？

現況

偵測資訊與分析獨立運作造成的穀倉效應 讓威脅易於藏匿

端點



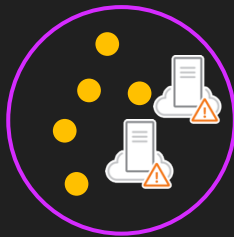
工控

郵件



網路

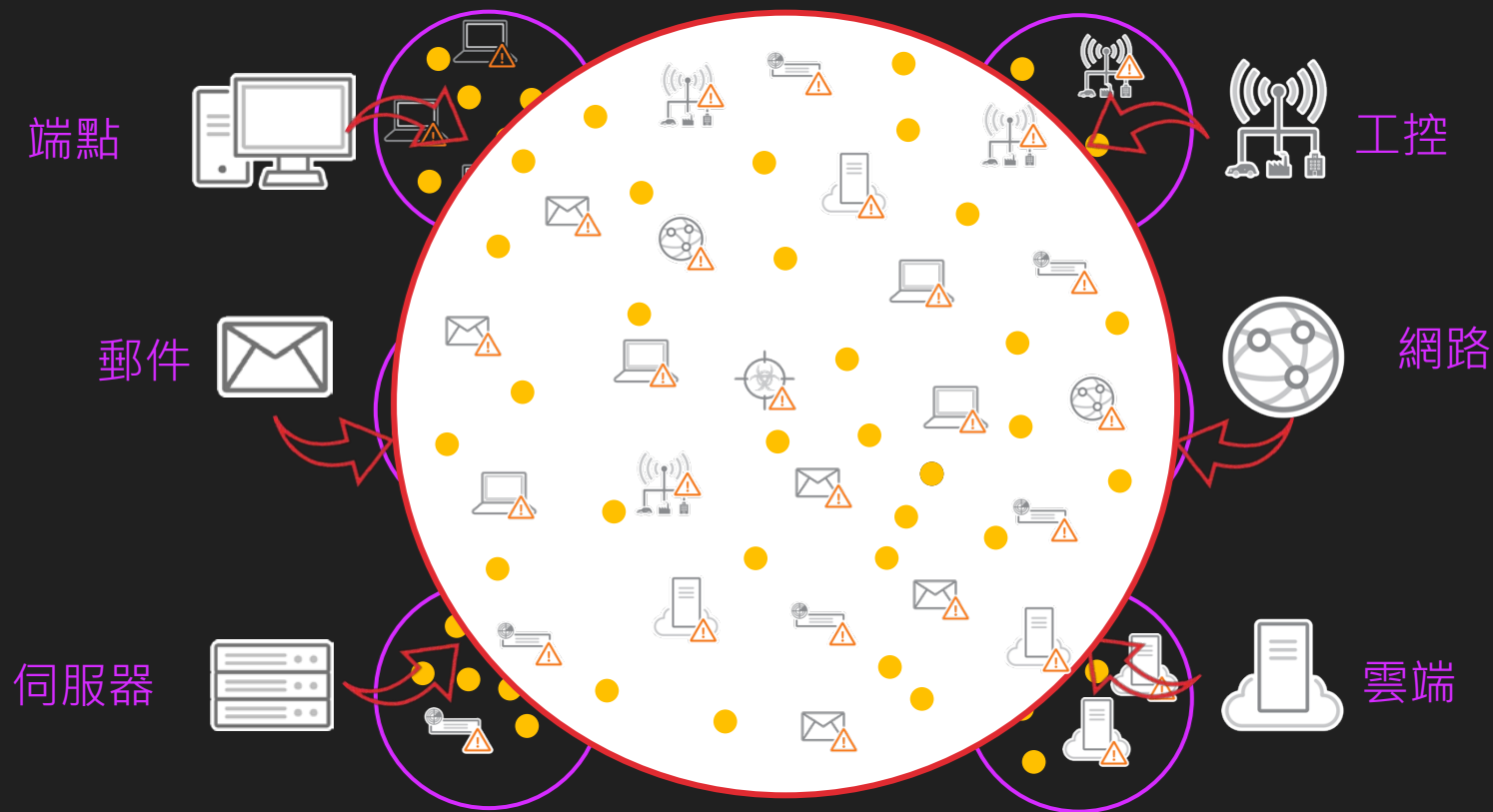
伺服器



雲端

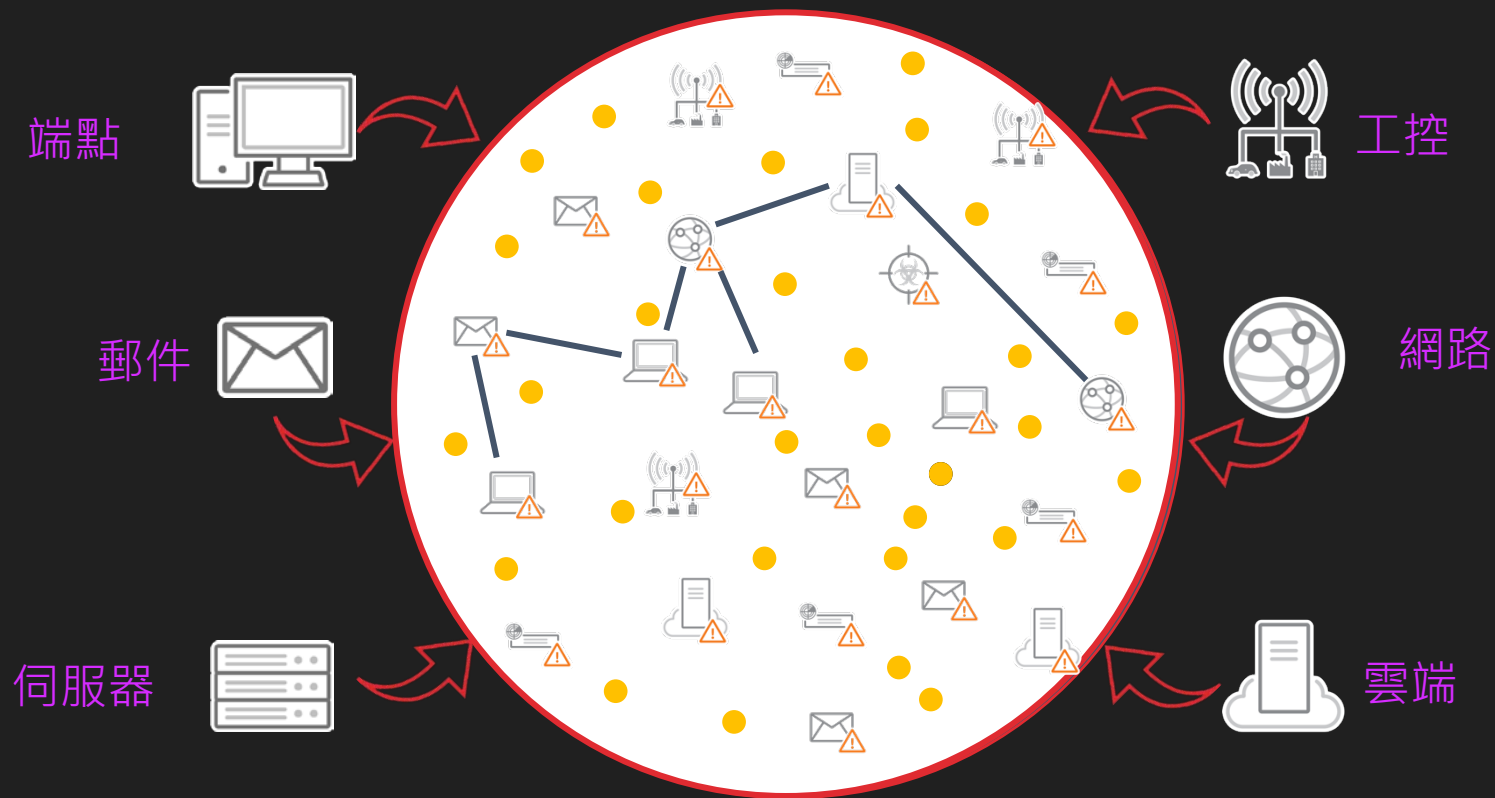
急需

跨層次資安訊息的關聯分析



急需

跨層次資安訊息的關聯分析

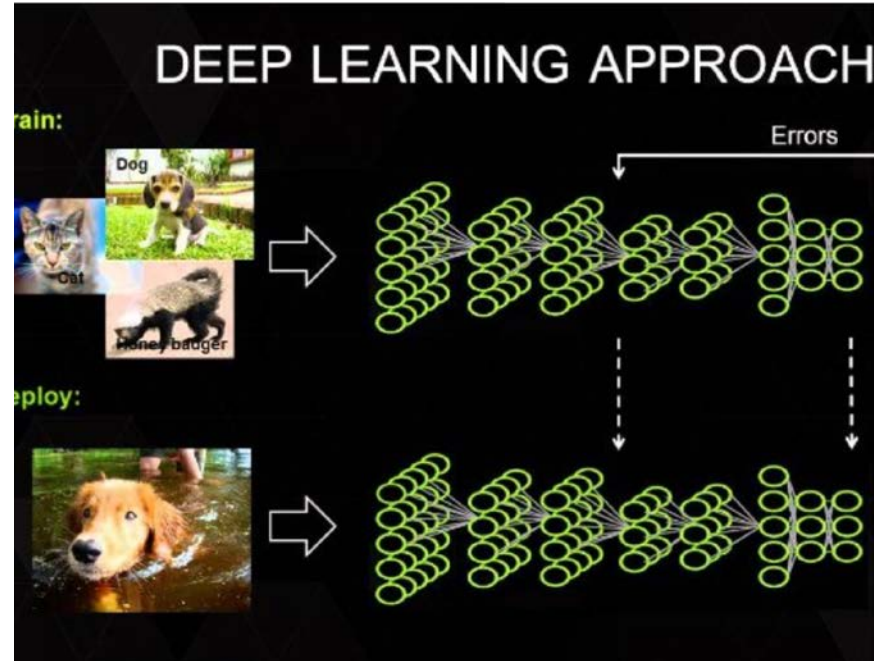


急需

跨層次資安訊息的關聯分析

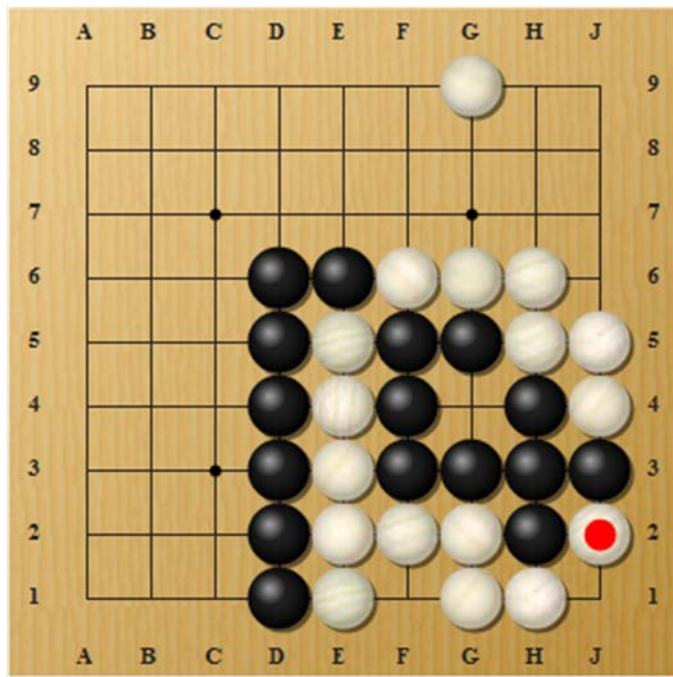


AI and Big data is all about data visualization

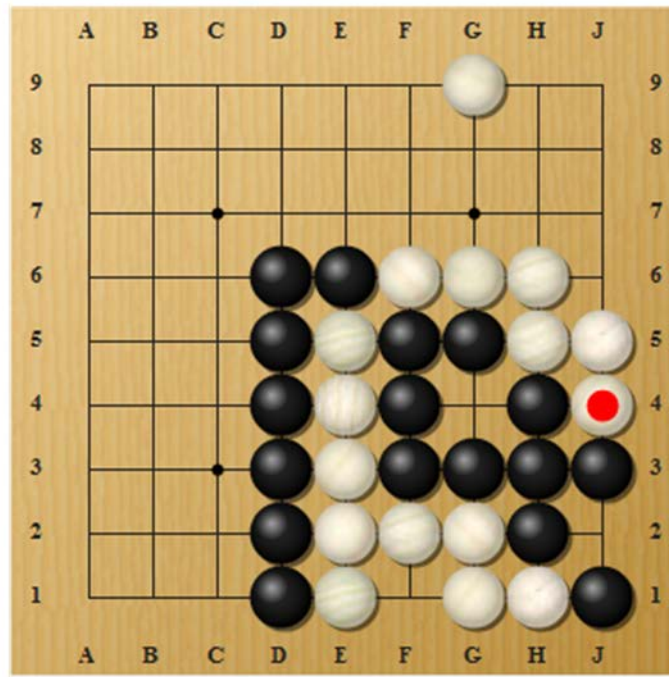


Source: <https://medium.com/botsupply/a-beginners-guide-to-deep-learning-5ee814cf7706>

白棋勝



黑棋勝



醫學之道 與AI 時代的科技人才



Source:江天成, 中醫自學, 天津出版社

機器學習 -- 看似不同的樣本

Ransom-Tescrypt1 (Known sample)

```

mov     ecx, [ebp-38h]
add     ecx, 1E6h
mov     edx, [ebp-2Ch]
sub     edx, ecx
mov     [ebp-2Ch], edx
mov     eax, [ebp-18h]
sub     eax, 2CEh
test    eax, eax
jz      short loc_41DFAB

```

```

mov     ecx, [ebp-38h]
add     ecx, [ebp-38h]
mov     edx, [ebp-18h]
sub     edx, ecx
mov     [ebp-18h], edx
mov     eax, [ebp-18h]
add     eax, 16Ah
[ 3 instructions deleted ]
mov     edx, [ebp-38h]
mov     eax, [ebp-18h]
lea     ecx, [eax+edx+288h]

```

Ransom-Tescrypt2 (Unknown)

```

mov     eax, [ebp-0Ch]
add     eax, [ebp-0Ch]

```

```

test    eax, eax
jz      short loc_41E598

```

```

mov     ecx, [ebp-0Ch]
mov     edx, [ebp-0Ch]
lea     eax, [edx+ecx-3Fh]
[ 11 instructions deleted ]

```

```

mov     ecx, [ebp-38h]
add     ecx, [ebp-0Ch]
test    ecx, ecx
jz      short loc_41E5D1

```

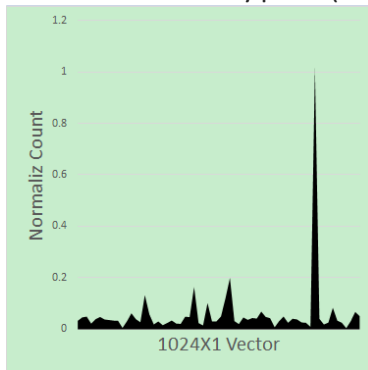
```

mov     edx, [ebp-38h]
add     edx, 5Bh
mov     eax, [ebp-0Ch]

```

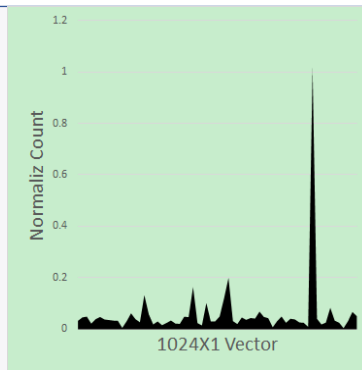
機器學習預測惡意意向 -- 具備類似的行爲

Ransom-Tescrypt1 (已知病毒樣本)



Opcode

Ransom-Tescrypt2 (未知病毒樣本)



Example of 2 code elements machine learning found to have similar characteristics

Import Table

女力崛起
全新視野
啟動新未來

HOW WE SEE COLORS

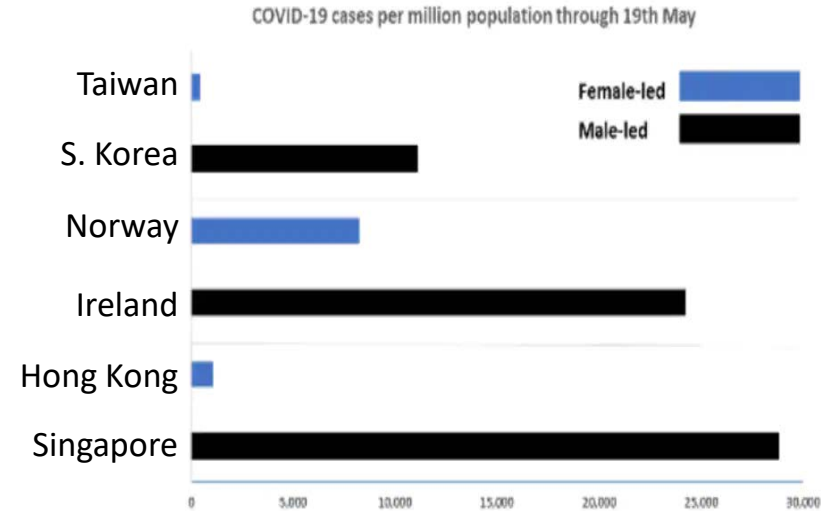
WOMEN

MEN



SCARLET	RED
DARK RED	RED
WINE RED	RED
PLUM	VIOLET
EGGPLANT	VIOLET
GRAPE	VIOLET
PURPLE	VIOLET
LAVENDER	VIOLET
CARNATION	PINK
STRAWBERRY	PINK
FUCHSIA	PINK
SALMON	PINK
ORANGE	ORANGE
MELON	ORANGE
YELLOW	YELLOW
LEMON	YELLOW
LIME	GREEN
FRESH GRASS	GREEN
GREEN	GREEN
DARK GREEN	GREEN
MOSS	GREEN
GREEN-YELLOW	GREEN
SEA GREEN	BLUE
BLUE-GREEN	BLUE
SKY BLUE	BLUE
TURQUOISE	BLUE

Empower Women, Empower Future – A Safer World



Source: <https://saraalimardani.com/2020/06/07/episode-3-world-leaders-covid-19/>

Still a Long Way to Go ...

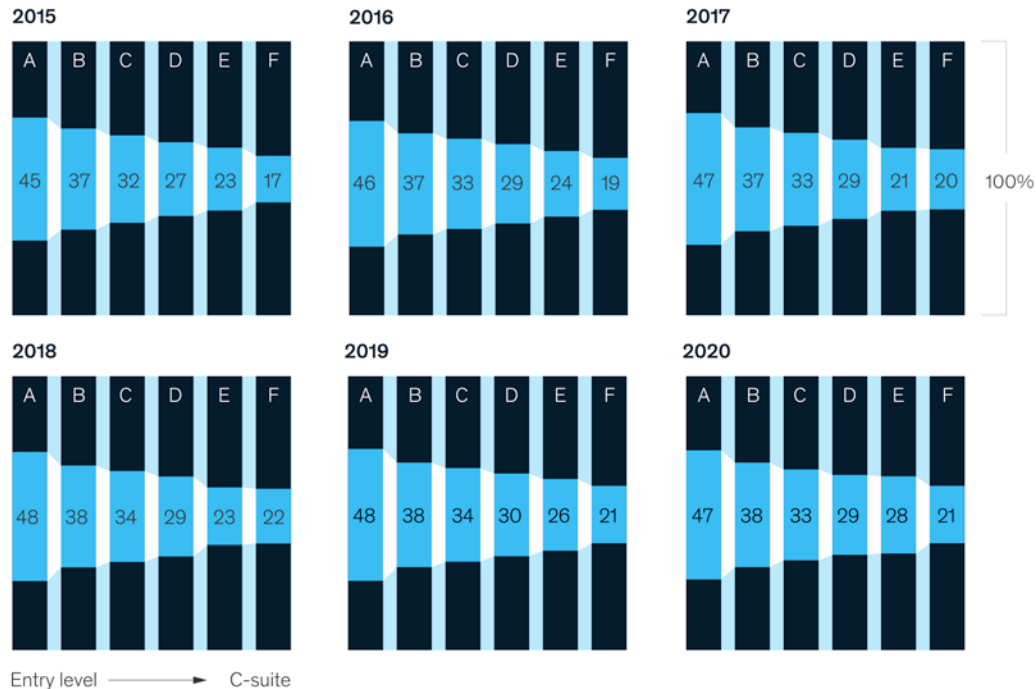
1970年至今，婦女就業進入市場對美國經濟成長的貢獻約佔25% *

儘管如此，女性高階主管的比例仍屬少數

Sources: McKinsey Consultant

Representation of women by level, % of employees

A = entry level B = manager C = senior manager/director D = vice president E = senior vice president F = C-suite



Source: Women in the Workplace 2020, LeanIn.Org and McKinsey, 2020

聞 – 跨界人才的培育



人機互動



問 — 問對的問題



問 – 人工智慧？

一個人聰明與否，可看他
如何回答問題

但是否具有智慧，得看他
提出何種問題

切 --- AI 只能幫助你做決定



特別的決定使人類傑出 – 李安與郭婞淳的決定

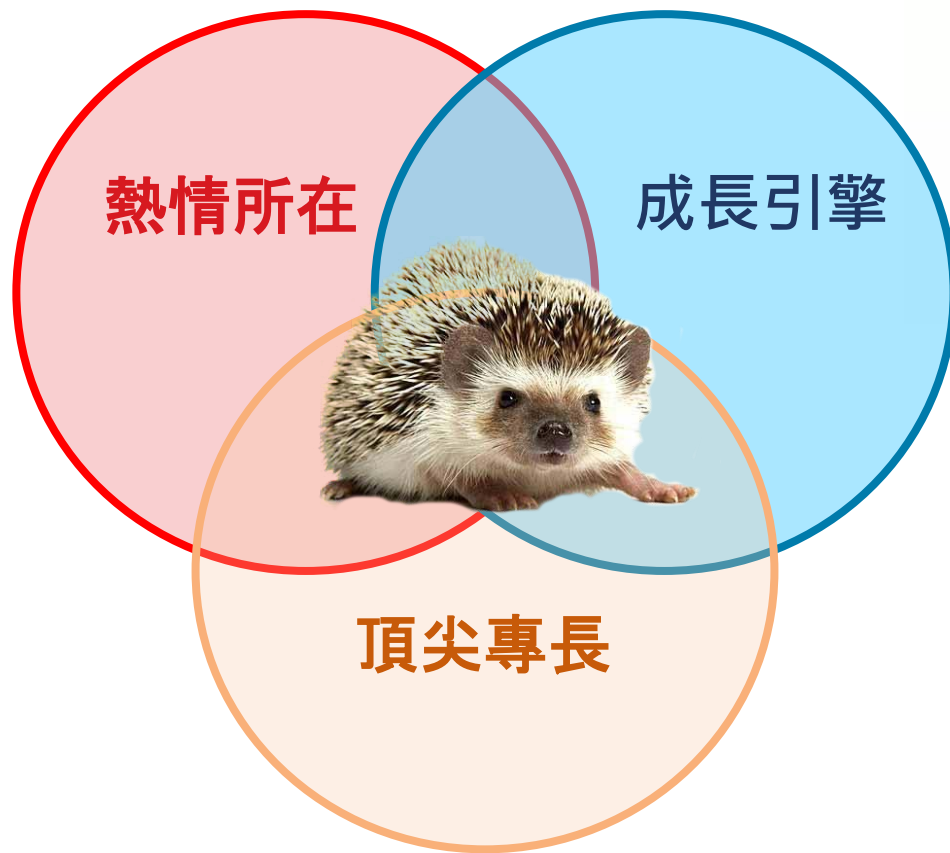


Source: <http://grouchoreviews.com/interviews/366>

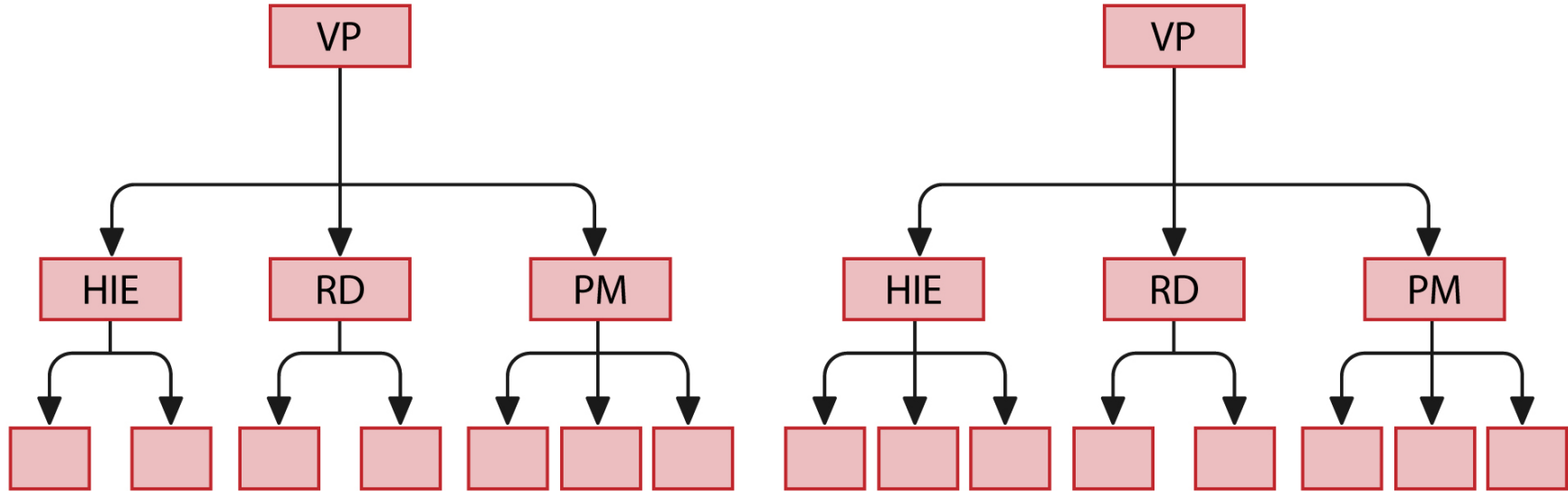


Source: <https://www.taiwannews.com.tw/en/news/3236800>

刺蝟法則 - 挖掘自己長處、心無旁騖執行

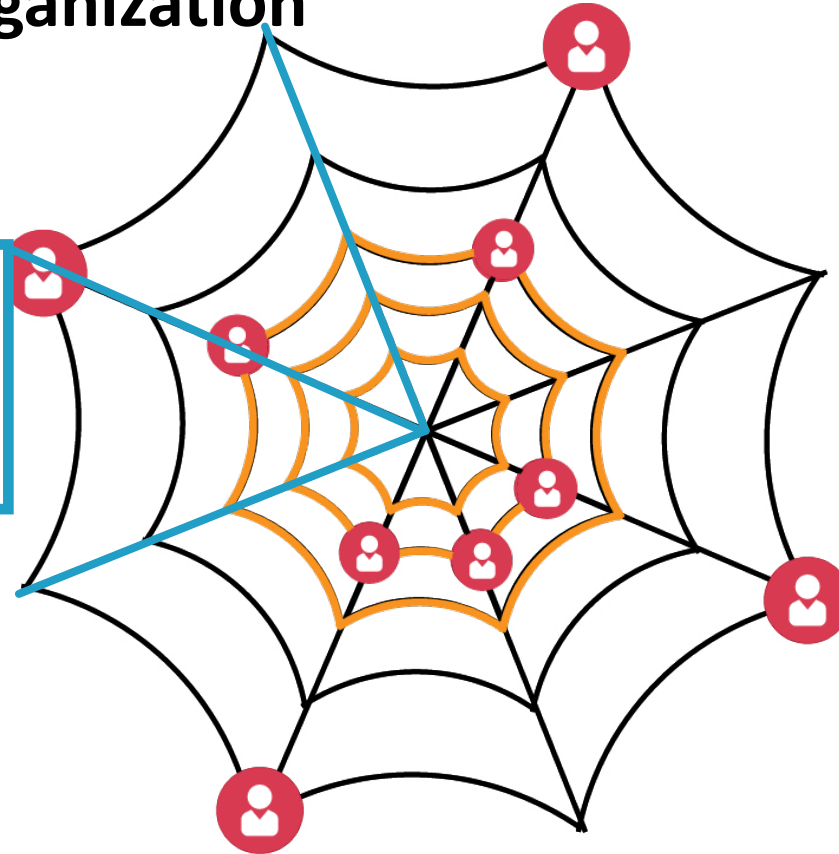


Organization Shift



Radial WEB Organization

Radial lines, like functional links. As a regular member of the functional team like RD, Sales, Marketing...etc.
You are as a **Teacher**.



Circular lines, like cross-functional links. As a member of a cross functional team to define/execute strategies, projects...etc.
You are a **Bridge**.

Builders, as the **intersection point**, makes the web resilient but strong.
You are as a **teacher** and **bridge** at the same time!



DevOps Mindset

智

Wisdom from Data

善用數據做決策

仁

Empathy for Customer Success

幫助他人（客戶）成功

勇

Bravery in Taking Responsibility

敢於追求成長，勇於承擔



跨國跨界跨性別，跨入科技護國新世代！



Thank you!

