

頂尖研究發表經驗對談

如何與管理大師麥克·波特  
和他的哈佛子弟兵們  
在SMJ (*Strategic Management Journal*)上論戰?




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## Reference

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- 2007-12-18: Measuring Superior Financial performance: Toward a general theory of sustained competitive advantage
- ➔ • 2008-03-13: "*Both reviewers see substantial potential merit in your study*"
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- ➔ • 2008-08-10: "*R1 believes you are close. R2 requests additional substantive work.*"
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- 2010-No.1-Vol31, with Fen-May Liou "Does Firm Performance Reveal its Own Causes? The Role of Bayesian Inference," Strategic Management Journal, 

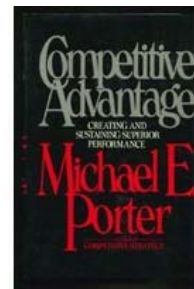
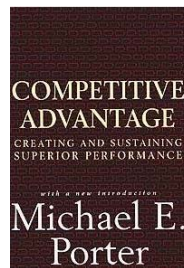
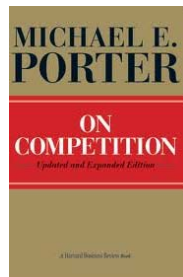
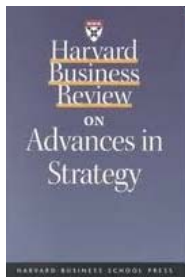


# 管理大師的智慧

## *Sustainable competitive advantage*

差異化 → 競爭優勢

「差異化」(product Differentiation) 與  
「相對低成本」(relative low cost) 戰略  
能創造和保持公司的競爭優勢。



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# 中國市場的否證

## *Falsification cases in China*



“Less version” 差異化 → 競爭優勢

- To this end, it deploys inductive logic to infer principles, theoretical claims, and/or 'takeaway' from particular cases and other empirical evidence. However, the popularity of this approach does not ensure that the generalizations procured from induction are universally tested or even broadly supported.*

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# 「競爭優勢」的範疇

## The Scope of Competitive Advantages

- organizational culture
- Organizational routines
- Resource bundle configuration
- Dynamic learning capability
- Causal ambiguity
- Strategic fit
- Strategic equifinality
- Contingency theory



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## 森林大火起因

「香煙蒂（競爭優勢）→ 森林大火（價值創造或企業成長）」的結論也可能是錯的 - 因為引起森林大火的充分必要條件還需要包括有人抽煙、抽煙附近的草木是乾燥易燃的、抽煙者的口袋正好有一包香煙和一盒火柴、所有的火柴頭是乾燥的、抽煙附沒有救火設備。

- *INUS condition: sustainable competitive advantage is 'an insufficient but necessary part of a condition [yielding sustained superior performance,] which is itself unnecessary but sufficient for the result'*



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# Porter (1985)的套套邏輯 (Tautology)

「競爭優勢」的三段論式邏輯推理 (syllogistics) :

- 大前提 (major premise) :  
「持續的競爭優勢」造就企業「高於行業水準的績效表現」
- 小前提 (minor premise) :  
「差異化戰略」能創造和保持「競爭優勢」
- 結論 (conclusion) :  
「差異化戰略」能造就企業「高於行業水準的績效表現」

但是，在中國，差異化不一定能造就企業高於行業水準的績效表現

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## How is knowledge acquired?

### Truism (恆真句)的套套邏輯

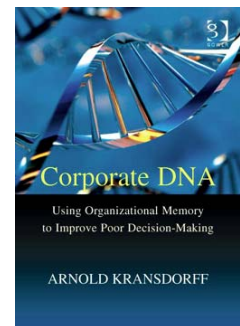
- 恆真句(的同義反複):  $C(A + B) = CA + CB$
- 套套邏輯是指同義重覆。同義重覆的句子不可能被事實否証或推翻，因此 tautology 是沒有解釋能力的。
- Survival of the fittest (適者生存)
- widow of the late Mr. Smith (已故史密斯先生的遺孀)
- • 恆真句: *VRIN (valuable, rare, inimitable, and non-substitutable) advantages are sources of sustainable competitive advantage* (資源論, Barney 1991)

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# How do we know what we know? what are its limits?

## 「恆真句」的相對論(relativism)

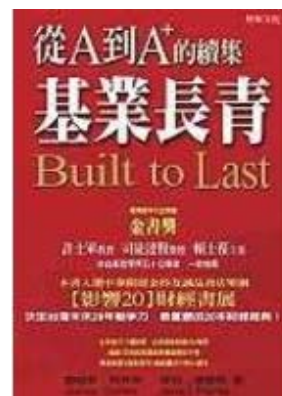
- SWOT analysis
- Competitive Advantage
- Core competency
- Disruptive innovations
- Resource-based theory (Barney 1991)
- • Organizational DNA (Toyota vs. Nissan)
- Blue Ocean strategy
- 明天會更好(1997)。
- 馬上就好(2008)。



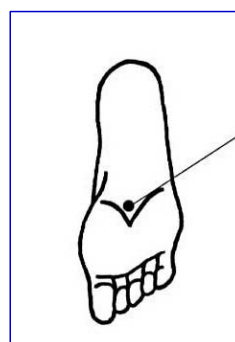
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## 策略管理的科學論證

Is strategic management a science?



池守湧泉能量足墊



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# 「恆真句」之驗證 「決定論」 VS. 「機率論」

並不是所有具競爭優勢的公司都可以持續創造績效；同樣的，並不是所有具競爭弱優勢(competitive disadvantage)的公司都無法創造績效。

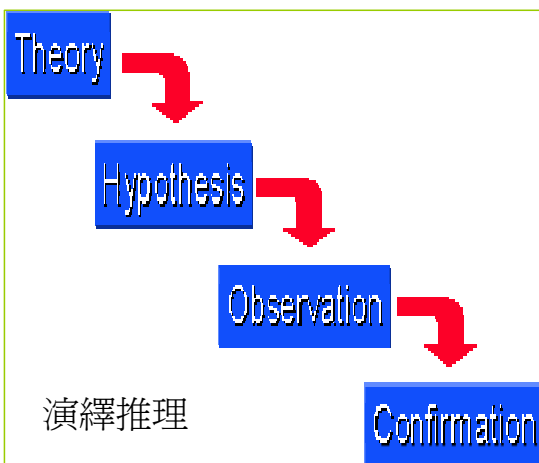
條件機率：

- *“prob (p/q) = .50 (50% of all firms that have sustainable competitive advantages achieve sustained superior performance)”*
- *prob (p/~q) = .05 (5% of all firms without sustainable competitive advantages achieve sustained superior performance)”*

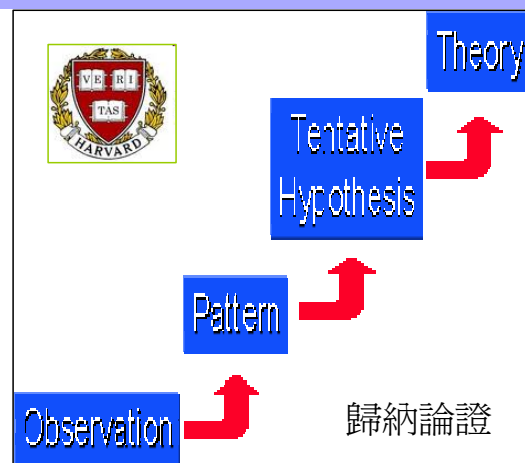
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## PCMPCL: 以子之矛攻子之盾 Inductive & Deductive Reasoning

Deductive Reasoning.  
Axiom of commutativity  
 $a + b = b + a$ , therefore  
 $2+3 = 3+2$



inductive reasoning  
people who own pets live longer.  
Does owning a pet cause  
longevity?



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# How is knowledge acquired?

## Bayesian Inductive Logic – 貝氏歸納推理

- 患有糖尿病、高血壓和高膽固醇的病人，得H1N1的機率較高。
- 1,000名的選民調查，有42%的人投綠不投藍。換句話說，95%的機率，有37%~47%的選民會投綠。
- Andrew Lawrence on Skyscraper Index: 中國第一高樓上海中心在2014年完工時，是否能擺脫「勞倫斯魔咒」？

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## 貝氏認識論

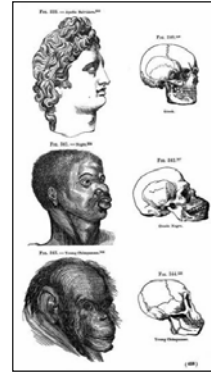
### Bayesian Epistemology

- The universal conditional (i.e., 100% of companies with sustainable competitive advantage have achieved sustainable superior performance) has been factored out. We only claim that 53 percent of firms with *evidence* of superior performance possess the attribute of competitive advantage.

競爭優勢(因) → 高績效(果)

$$\begin{aligned} \text{prob}(q/p) &= \frac{\text{prob}(p/q) \times \text{prob}(q)}{[\text{prob}(p/q) \times \text{prob}(q)] + [\text{prob}(p/\sim q) \times \text{prob}(\sim q)]} = \frac{\text{prob}(p/q) \times \text{prob}(q)}{\text{prob}(p)} \\ &= \frac{(0.50)(0.10)}{(0.50)(0.10) + (0.05)(0.90)} = \frac{0.05}{0.095} = 0.53 \quad (\text{Powell, 2001:880}) \quad (1) \end{aligned}$$

# 證據的「果」可以檢驗揭發真實的「因」



- *This is the well-known 'washing out of priors' phenomenon in the Bayesian literature.*
- *People rationally respond to newly acquired evidence from reality by revising their ontological beliefs (the priors) over time. Evidence supporting the 'false' theory (i.e., that firms without sustainable competitive advantage have achieved sustained superior performance) becomes 'swamped' or 'washed out' as the value of the 'true' theory increases.*

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## 紛爭的世界半導體產業

張忠謀奉勸Global Foundries董座 「傷亡慘重前，快退休吧」！

悠悠..... 发表于: 2009-7-31 11:27 来源: 半导体技术天地

張忠謀奉勸Global Foundries董座 「傷亡慘重前，快退休吧」！

2009/07/31-宋丁儀

張忠謀重新執掌台積電兵符首場法說便不同凡響，嫻熟英美文學與西洋近代史的張忠謀不但引用古典莎翁名劇，更從西洋戰史知名戰役史特林格勒(Stalingrad)中妙喻台積電與競爭者Global Foundries的關係。他說，新競爭者中中芯國際與Global Foundries不論價格多少，都不值得購併，他更奉勸老友、現任Global Foundries董事長Hector Ruiz與其耗費那麼多錢，不如「在傷亡慘重前，趕快退休吧」！

張忠謀在法說會展現了他帶領台積電不畏競爭的霸氣！整場法說會外資居然沒人提問關於Global Foundries的問題，直到最後一個提問機會輪到高盛的半導體分析師呂東風，張忠謀大嘆，怎麼會都沒有人問呢？引發現場一片笑聲。

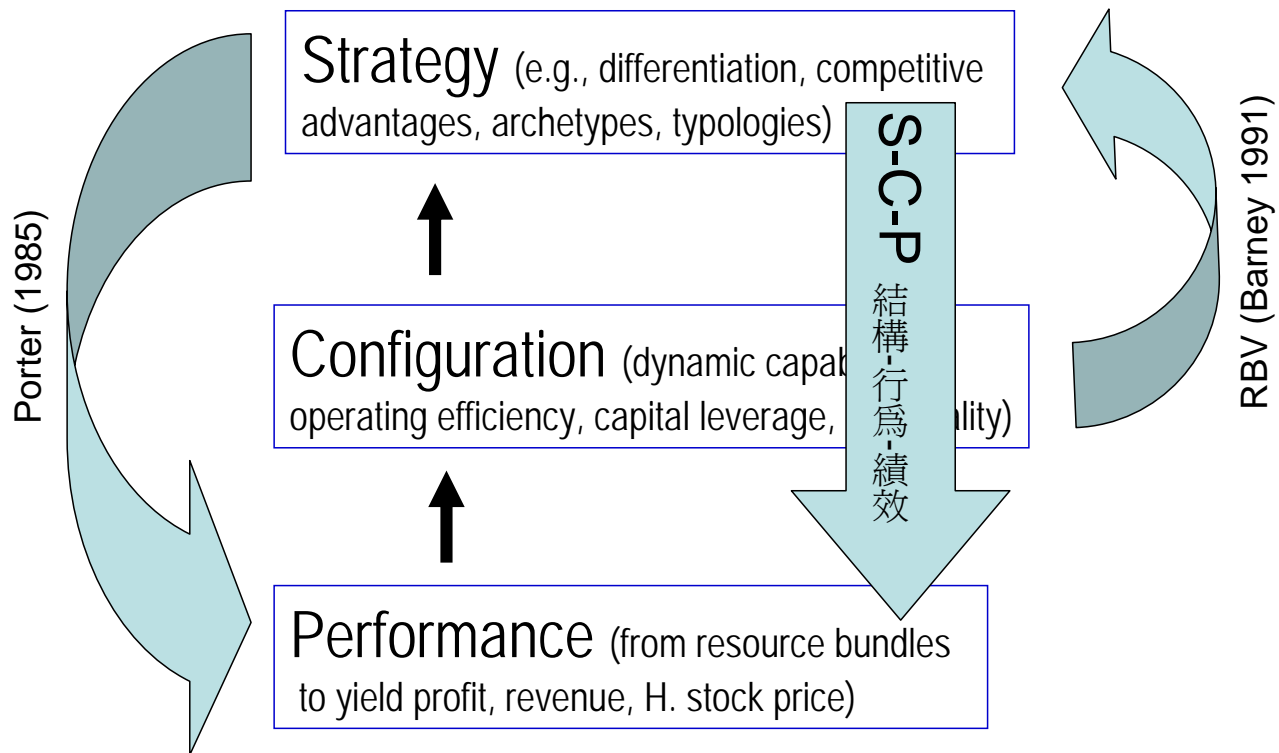
張忠謀說，在競爭者之中，屬於IBM陣營的便有3家，一是新加坡特許(Chartered)，雖然特許值得購併，但是價格太高，這時便引發現場一片騷動，大家揣測是否台積電與特許曾經洽談過；張忠謀繼續說，其次中芯國際與Global Foundries一樣，他認為不論價格是多少都不值得購併，這個評語更引起現場人士譁然。

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# 永續競爭優勢的「認識論」

## Bayesian Epistemology on Theories of Strategic Management



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# 波特的「競爭優勢」理論?

Y.-E. Tang and F.-M. Liou

Table 1. Principal component analysis of financial indicators and the resulting resource configurations

Financial indicators	Resource configuration		
	Factor1: Relationship advantage	Factor2: Management ability	Factor3: Knowledge management
Accounts receivable turnover	<b>0.578</b>	-0.085	0.338
CGS/sales	<b>-0.677</b>	-0.204	-0.417
Inventory turnover	<b>0.595</b>	0.053	-0.033
Accounts payable turnover	<b>0.684</b>	0.008	0.043
R&D/sales	0.238	0.046	<b>0.859</b>
SG&A/sales	-0.063	-0.184	<b>0.812</b>
Depreciation/sales	0.034	<b>0.870</b>	0.014
Tax/sales	<b>0.568</b>	-0.229	-0.379
Fixed assets turnover	0.017	<b>-0.793</b>	0.101
Eigen value	2.36	1.56	1.45
Accumulated variance (%)	0.26	0.43	0.60

Bold numbers indicate a high correlation between the common factor and the corresponding financial indicator (greater than 0.5).

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## DOES FIRM PERFORMANCE REVEAL ITS OWN CAUSES? THE ROLE OF BAYESIAN INFERENCE

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*A central problem in strategic management is how the inference 'sustainable competitive advantage generates sustainable superior performance' can be put into practice. In this article we develop a theoretical framework to understand the causal relationships among (1) sustainable competitive advantage, (2) configuration, (3) dynamic capability, and (4) sustainable superior performance. We propose that a firm's competitive advantage, resource bundle configuration, and dynamic learning capability cannot be comprehended by outsiders. Its operational performance, however, can be captured by financial indicators. We promote an inductive Bayesian interpretation of the sustainable competitive advantage proposition. From this viewpoint, the presence or absence of competitive advantage may be reflected in the causal relationship between resource configuration, dynamic capability, and observable financial performance. We apply this theoretical framework to an example drawn from the global semiconductor industry, an area in which resource configuration and dynamic capability are essential to performance. The paper concludes with a summary of the proposed model and suggestions for future theoretical development of strategic management. Copyright © 2009 John Wiley & Sons, Ltd.*