注意事項:

- 1. 本試題包含貳篇管理專文,每篇專文後有數題問答題,請考生依據專文內容作答。
- 2. 作答時,字體務必清晰,用詞務必明確。
- 3. 每題配分不同,合計100分。

看板式管理的省思

EMBA 雜誌, 216期, 2004年8月

日本豐田汽車的看板式管理,不但是日本式管理的代名詞,多年來也成為全球製造業 取經的對象。

豐田汽車運用看板式管理,選擇少數優良的供應商,和這些供應商維持深入緊密的關係,並且盡量壓低庫存及時運送(just-in-time),以降低成本,追求企業經營的最高效率。

這張原本綿密運作的大型蛛網,在去年二月,由於其中一個環節出了狀況--豐田汽車一家製造煞車零件的供應商工廠發生大火--結果使得整個系統幾乎崩潰,整個生產線耽誤了四天,至少減產了七萬輛左右的汽車。

這個意外事件帶給企業界很大的衝擊,過去大家不斷傳頌的看板式管理,竟然有其極為脆弱的一面。很多人猜測,豐田經歷這個教訓後,是不是會檢討看板式管理,選擇其他做法?但根據麻省理工學院出版的「史隆管理評論」最近分析,豐田汽車並沒有改變看板式管理的打算,原因是一部汽車的零件總共高達三萬個,如果只是為了機率非常小的意外事件,而增加每種零件的供應商,結果對成本帶來的負擔令人不敢設想。

事實上,根據學者的分析,採用任何制度都仍然可能發生意外,重點是怎麼樣在危機發生時迅速反應,化解問題。這次豐田專門生產比例煞車器的衛星工廠愛新精幾火災事件,因為平日各衛星工廠之間的關係緊密,互信互賴,所以在兩天之內,就解決了這個問題。

當的愛新精機發生大火時,正是日本汽車因為即將提高稅賦,大家趕著買汽車的需求高峰,因此,各工廠已經各憑本事,趕工加班,希望能夠供應市場的需求。

愛新精機和豐田往來已經三十多年,是供應豐田汽車比例煞車器(P-valves)這個重要零件的唯一供應商,因此生產線一旦停擺,其他很多衛星工廠也立刻受到影響。

這些衛星工廠立刻主動協調,不過幾天,就在幾乎沒有生產過比例煞車器經驗的其他 工廠,開始生產煞車器的零組件,再運到愛新精機進行組裝,然後運到豐田汽車工廠。參加協調的衛星工廠超過兩百家,而且幾乎都由衛星工廠間相互橫向協調調度,並非來自豐田汽車的直接控制,結果不但將復原時間壓縮到最短,而且事後也沒有傳出什麼技術專利外漏或財務補償方面的爭執。

很多原因讓豐田的衛星工廠如此運作。首先,及時生產制度的設計,原本就為了能夠 很快知道瓶頸出在哪裡,讓員工和經理人持續不斷偵測,並且流程順暢運作。

其次,透過看板式管理,工人和主管已經養成一種很務實的問題解決能力,知道怎樣解決目前的問題。舉例來說,豐田會鼓勵作業現場員工只要是嚴重問題發生,就立刻將生產線停下來,以便迅速排除障礙,從源頭解決問題,讓問題不會越來越嚴重。

第三、看板式管理要求各衛星工廠之間緊密協調和合作,多年來衛星工廠已經培養了這種合作默契和能力,在危機發生時,剛好可以展現出來。這些衛星工廠間平日共享資訊和知識,定期互相交換員工,並時常面對面溝通,這些做法都強化了各企業相互學習,鼓勵團隊合作,在科技應用、管理,以及遊戲規則方面,也都有了共同的語言。因此可以在

危機時,迅速溝通,化解問題。

豐田公司這套系統經過數十年的歷史錘鍊,才能夠在綿密的衛星工廠間,建立這樣深厚的關係。一般企業雖然無法在一時之間達到這樣的能力,但是加強供應商之間彼此橫向的溝通和知識共享,顯然有助於建立長期的競爭力。

問題:

- 1-1 理想的「看板式管理」可以降低各類原物料及在製品的庫存;但會面臨當上游作業或 廠商發生預期外事件而無法供貨時,造成停工待料的損失。請簡單說明在決定「是否 要持有庫存」及「持有多少庫存」時,有那些考量因素會影響決策者的決策。(20分)
- 1-2 作者在文中說到「看板式管理要求各衛星工廠之間緊密協調和合作,多年來衛星工廠已經培養了這種合作默契和能力,在危機發生時,剛好可以展現出來。這些衛星工廠間平日共享資訊和知識,定期互相交換員工,並時常面對面溝通,這些做法都強化了各企業相互學習,鼓勵團隊合作,在科技應用、管理,以及遊戲規則方面,也都有了共同的語言。因此可以在危機時,迅速溝通,化解問題。」請各位就工作中的經驗,說明如何可以達到此種理想。(20 分)

Balancing Short- and Long-term Performance

By Janamitra Devan, Anna Kristina Millan, and Pranav Shirke The McKinsey Quarterly, Nov. 1, 2005

Many corporate leaders struggle to increase long-term shareholder value. This comes as no surprise, given an increasingly competitive environment in which financial markets often evaluate a company and its CEO by the most recent quarterly results. But the cost of neglecting long-term performance can be high in today's rapidly changing business world, where most companies either do not survive or are acquired.

Our research into companies listed on the S&P 500 from 1984 to 2004 shows that some do achieve strong results in both the short and the long term. We identified 266 companies and grouped them in four quadrants: companies that recorded strong short- and long-term performance, those that performed poorly in the short term but well over time, others that were strong in the former but lackluster in the latter, and companies that were mediocre in both (see Figure 1).

We then examined how the companies in each quadrant performed along four dimensions: long-term total returns to shareholders (TRS), survival rates, the tenure of current CEOs, and the volatility of share prices reflected in the beta deviation from the industry average.

Clearly, the ability to balance short- and long-term performance pays off handsomely. On average, companies with strong overall performance beat companies in all the other quadrants on most measures. The average TRS of the top corporations was 9.4 percentage points higher than the average of companies with mediocre short- and long-term performance, and the survival rate of the former was substantially higher: 73 percent were still around in 2004—the end of the analysis period—as opposed to 57 percent of the companies with mediocre performance.

Moreover, a CEO at the top performers remained in office almost three years longer, and those companies' stock prices were substantially less volatile.

High	Total returns to shareholders (TRS), %	15.5	TRS %	18.5
Long-term performance	Survival rate %	72	Survival rate %	73
	Tenure of current CEO in years	4.5	Tenure of current CEO in years	7.7
	Beta deviation from industry average	0.05	Beta deviation from industry average	-0.01
	47 companies		57 companies	
	TRS %	9.1	TRS %	14.2
	Survival rate %	57	Survival rate %	64
	Tenure of current CEO in years	4.7	Tenure of current CEO in years	6.0
	Beta deviation from industry average	0.19	Beta deviation from industry average	-0.04
	81 companies		76 companies	
Low	Short-term performance			High

Figure 1

Companies with robust long-term but lackluster short-term performance had survival rates almost equal to those of the top performers but scored lower on each of the other measures. Companies with strong short-term but weak long-term performance had marginally less volatile stocks than did companies with strong performance overall but were weaker on the other three measures.

Living up to investor expectations for any length of time is usually demanding. Our analysis showed that, of the high-performing companies in our sample, a few owed their success to a prolonged sweet spot for their products or services rather than to a deliberate attempt to achieve balance. The rest skillfully juggled current opportunities with others providing for long-term growth. This approach was relatively painless for companies with large pools of capital to finance long-term options. The majority of corporations, however, balanced both objectives only by making difficult trade-offs with limited resources and in the face of unrelenting shareholder pressure for an immediate return on equity.

Even sweet spots turn sour over time, and overflowing pools of capital occasionally run low. Regardless of whether (and how) companies may be juggling short- and long-term performance today, those aiming for longevity need to balance trade-offs between current earnings and shareholder value over an extended period of time. How can these goals be achieved?

We found that many successful companies instilled a long-term mind-set. They tended to appoint CEOs who kept an eye on short-term operational performance, for example, while also constantly emphasizing innovation that could produce long-term growth. These companies also typically introduced dynamic strategic processes to evaluate growth initiatives on an ongoing basis, thus enabling management to be nimble when it decided to abandon, reorient, or accelerate them. Successful companies also used financial incentives to attain both short- and long-term targets. While none of the levers, on its own, guaranteed success—a plethora of other factors was involved, such as managerial talent, organizational flexibility, and strong execution skills—they are a starting point.

Questions:

- 2-1 Please answer the following three questions:
 - 2-1.1 Please name one short-term performance index and one long-term performance index. (5 分)

- 2-1.2 Please define the indices in question 2-1.1. (5 分)
- 2-1.3 Please describe how the indices in 2-1.1 are collected, and how they can be used to increase the competency of a company. (20 分)
- 2-2 What can you conclude based upon the information provided in Figure 1? (15 分)
- 2-3 Please use no more than *100 Chinese Characters* to write an abstract of the above article. (15 分)