

考試科目 Course	企業管理個案	開課系級 Dept. & Class	科學乙	日期 Date, Period	月	日	試題編號 Course No.
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國立政治大學圖書館

ber, Kodak is optimistic it will rule in its favor—a step that could help Kodak raise its share of the world's second-biggest film market to as much as 30% says Ira Wolf, head of Kodak Japan. He also says that a fairer fight in Japan would make for a fairer fight not only in the U.S., but also in critical developing markets such as China. But with Fuji on the verge of opening a South Carolina plant that will produce 100 million rolls of color film a year—equal to about 14% of the U.S. market—even a victory might do little to reverse the trend on Kodak's home turf.

Ironically, given his background at Motorola, Fisher's digital strategy has been one of the biggest drags on Kodak's performance. He has devoted substantial energy to making Kodak more like Motorola, capable of producing new state-of-the-art products every few months. Company factories are churning out an impressive array of digital cameras, scanners, and other devices at a breakneck clip. And sales of digital products last year—the most recent numbers available—were \$1.5 billion, up 26%. Because of the breadth of its products, Kodak is far ahead of any other company in digital imaging sales.

**MAGIC TRICKS.** The problem is that competitors such as Hewlett-Packard, Canon, and Epson are rapidly producing competing products at ever lower prices, and Kodak is having trouble developing any kind of technological leadership. Fisher acknowledged in July that he was surprised at how aggressive others were at following Kodak with new products, particularly digital cameras, and at slashing prices. As recently as late last year, Fisher had hoped Kodak's digital business would be profitable in 1997. But partly because of aggressive competition that has kept its camera profit margins low, losses through the first half climbed to \$100 million. Analysts estimate that the losses grew to \$150 million in the third quarter.

The biggest test of Fisher's digital strategy comes next year. That's when he'll unveil its core component—a global network of digital printing stations, called Image Magic, now being installed in retail stores worldwide. Consumers will be able to use the devices to access photos they store on the Internet, manipulate them in various ways, and print them. So far, tens of thousands of Image Magic kiosks have been installed, but the Internet connections won't be done until next year.

Competitors and industry consultants question if Kodak's kiosks will become profitable before alternative digital imaging technology becomes widely available. HP, Canon, Epson, and others are rapidly producing lower-cost photo-quality printers.

**BIG PUSH**  
Fisher recently said he was surprised at how aggressively rivals followed Kodak with digital cameras

## Fisher has no interest in a price war with Fuji but says Kodak will counterattack. "We don't intend to continue to lose share..." he says

And some marketing experts believe that consumers will prefer these devices, which they can use at home, to Fisher's kiosks. "Kodak is trying to get customers to conform to their old business model, but consumers are likely to favor a more direct approach," of printing pictures at home and playing with them on their PC, says James F. Moore, chairman of GeoPartners Inc. in Cambridge, Mass., a strategy consultant who has worked for HP and other high-tech giants.

Kodak executives are keenly aware that a low-cost, photo-quality printer is a crucial weapon missing from their digital arsenal. Fisher is hoping to be a dominant player in what he views as two distinct markets: the home digital darkroom and kiosk-based digital imaging at retailers. But as recently as June, Kodak was still struggling with how to enter the home market. In interviews with *BUSINESS WEEK*, three top Kodak executives argued for three different approaches to the consumer printer market. Former digital imaging chief Robert M. Unterberger wanted to wait until a low-cost printer technology emerged that would deliver superior picture quality. Robert L. LaPerle, head of digital consumer products, thought Kodak should immediately begin selling inkjet printers. And Fisher said Kodak would begin selling inkjet printers as soon as consumer demand picked up, possibly by reselling units made by another supplier.

Meanwhile, Fisher can't afford to neglect the old analog business, where Kodak is being hammered by Fuji. In addition to steep price cuts, Fuji has significantly stepped up marketing efforts and increased its U.S. visibility. Its green-and-white blimp has become ubiquitous at sporting events. More substantively, Fuji last year signed an exclusive deal for Wal-Mart Stores Inc.'s photofinishing business, the nation's largest. The result: Fuji's U.S. market share has jumped to 16%, up from 11% as recently as last year, while Kodak's has dropped into the high 60s.

Fisher says Kodak has been responding "tactically" to Fuji's price cuts all year with special promotions of its own. But that appears to have done little good, and he's now planning a counterattack, which, according to Kodak's ad agency, will include a major new campaign. "We do not intend to continue to lose share at the rate we lost over the summer months," says Fisher. Although he won't disclose details of his plans for Fuji, he adds it won't involve a price war—for an obvious reason. Every 1% cut in Kodak film prices results in roughly a 1% drop in earnings per share, figures Jonathan Rosenzweig, an



**LITTLE PAYOFF**  
Kodak churns out an impressive array of digital products but hasn't established a technology lead



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against Sakumon Brothers Inc. The best Kodak can hope for is to slow, but probably not stop, Fuji's gain in U. S. market share, Fisher concedes.

Those innards by Fuji are steadily eroding Kodak's profits. And that's the key reason many outsiders are arguing that Fisher needs to take

## Cover Story

drastic action to reduce Kodak's costs. Cost-cutting is especially critical on the digital side of the business, where Kodak faces a horde of lean and mean competitors. To slim down, Fisher is considering reducing its manufacturing of hardware by outsourcing some digital photography equipment. "Com- peting head-on in hardware with the rest of the world is

probably not going to be a profitable business for Kodak," says Strickland.

When Fisher arrived in Rochester four years ago, he was hailed as a corporate savior. Kodak employees and managers believed that Fisher would magically increase profits, develop new products, and restore the company's prestige—all with few painful cutbacks or changes to the Kodak mind-set. Probably no one could have lived up to those expectations, and trying to do so has cost Fisher precious time. Kodak can still be made into a much more profitable, growth-oriented company. But to do so, George Fisher has to be a lot tougher—and faster.

By Geoffrey Smith, with William C. Symonds in Boston, Peter Dierow in San Francisco, Ellen Nordmo in New York, Paul C. Judge in Rochester, and bureau reports

## 問答題：共四題

一. 在寡佔市場中，廠商數愈多，Cartel 組織愈不穩定，你同意嗎？請詳細說明理由。(25%)

二. 某著名歌星每一場次的報酬高達千萬之，而他的伴侶者僅拿幾萬之酬勞，為什麼？這種現象在國際網路世界中有何涵義？請詳細分析之。(25%)

三. 何謂交易成本理論？請嘗試用交易成本理論解釋產業組織中的整合或分化現象。(25%)

四. 何謂資訊不對稱？雇主僱用員工時亦會產生資訊不對稱的現象嗎？可以舉例那些做壞事加以克服。(25%)

考試科目 Course	商學總論	開課系級 Dept. & Class	科技管理 研究所(西)	日期 Date, Period	月	日	試題編號 Course No.
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國立政治大學圖書館

一. 請回答以下有關企業的社会責任問題 (30%)

- (1) 何謂企業的社会責任?
- (2) 學者間对社会責任有正反不同意見, 請說明您自己的看法和理由。
- (3) 根據某雜誌調查結果, 重視企業責任的企業集團排名順序為: 統一、台塑、和信、奇美、長榮。請就其中任一集團, 舉出二件重視社会責任的實例。

二. 企業有不同的型式, 如独资、合夥、公司等, 何以大部份的企業以公司型式從事交易, 原因何在?

一個由年青人創業的高科技事業, 應以何種型式最有利? 和最有可能? (20%)

三. 企業管理人員具有談判者的角色, 請問

- (1) 高科技公司向國外有國技術授權或權利金進案的談判, 應具備那些能力?
- (2) 這些能力如何培養? (20%)

四. 智慧財產已成為高科技產業非常重要的資產。從商學的角度, 某種程度上, 智慧財產實即技術與創新之結果, 請回答以下問題: (30%)

- (1) 智慧財產(技術與創新)有何特色?
- (2) 這些特色在研發管理上有何特別意義?
- (3) 在全球化企業經營中常涉及兩國企業間的技术授權, 技術授權有何優缺點?

考試科目 Course	經濟學	開課系級 Dept. & Class	科學所 甲組	日期 Date, Period	4月25日 第 1 節	試題編號 CourseNo.
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一、解釋名詞（40%，每題 5%）

1. 加速原理
2. 乘數效果
3. 節儉的矛盾性
4. 生產力的矛盾
5. 流動性陷阱
6. 理性預期
7. 外溢效果
8. 外部成本

二、問答題（40%）

1. 為什麼經濟學家經常有不同的意見？（8%）
2. 為什麼「私有財產制」是資本主義中最重要的基本元素？何謂「公共財」？（8%）
3. 自由市場有什麼重要的功能？又什麼狀況下會產生「市場失靈」？（8%）
4. 傳統經濟成長率指標「國民生產毛額」GDP 有那些缺失？已有那些不同的指標嘗試來修正它？（16%）

三、評論（20%）

以下這段文字是 Gary Becker 在「生活的經濟學」中的一段論著，請就文中的四個論點挑出二個進行評論，說明你贊成或反對他的論點，為什麼？

1.

國際貿易在過去幾十年來快速擴張，不僅促進經濟成長，也大幅減少了小國所處的劣勢，因為這些國家雖然沒有很大的國內市場，但可以用國際市場來加以取代。這表示，長期以來在政治或經濟上相互對立的族群，已經沒有必要為了擴大經濟規模的好處，而被迫共同生存在同一個國家裡。

我們看到很多規模很小的國家，就是利用國際市場的管道來銷售產品，而在經濟上有相當傑出的表現。這些小國家成功的例子，鼓勵了幾個面臨嚴重族群問題的國家走向分裂，例如捷克斯拉夫就分裂成捷克共和國和斯洛伐克；而南斯拉夫也分裂成波士尼亞、克羅埃西亞以及塞爾維亞等小國。除此以外，很多國家的族群也因此而要求更大的自治權力，甚至於要求獨立。例如加拿大的魁北克，西班牙東北地區的加泰隆尼亞，以及庫德族等。

2.

歐洲聯盟的歐洲單一貨幣計畫以歐元來取代德國馬克和法國法郎等成員國的貨幣。由於各國貨幣在目前的國際資本市場裡，已經能夠有效地競爭，因此我們建議歐洲聯盟應該往相反的方向走，也就是增加各國貨幣之間的競爭，而不是藉由單一貨幣的實施而減少彼此的競爭。

要提升各歐盟國家貨幣的競爭，第一步就要讓每國成員國都要接受其他成員國的貨幣為法定貨幣。在競爭的程度提高之後，某些國家透過擴大通貨發行來挹注政府收入的趨勢，就會緩和下來，以便控制通貨膨脹壓力。如果各成員國的貨幣相互競爭，那麼通貨發行控制很差的國家，就不再因為擁有獨占地位而受到保護。當某國貨幣開始大幅貶值的時候，該國的家庭和企



\* 以下每題各10分，共計100分 (甲組)

1. 若  $f(x) = \begin{cases} x^3, & x < 1 \\ 3-x, & x > 1 \end{cases}$ ，求  $\lim_{x \rightarrow 1} f(x)$

2. 求  $\lim_{x \rightarrow \infty} (\sqrt{x + \sqrt{x + \sqrt{x}}} - \sqrt{x})$

3. 請證明  $\frac{1}{11} < \sqrt{404} - \sqrt{400} < \frac{1}{10}$

4. 求  $\int \frac{1}{x^2 \sqrt{x^2+9}} dx$

5. 求  $\int_{-1}^2 |x^3 - 2x^2 - x + 2| dx$

6. 請證明積分  $\int_1^{\infty} \frac{\sin x}{x^p} dx$  收斂 (其中  $p > 0$ )

7. 求  $\int_0^{\pi/2} \int_y^{\pi/2} \frac{\sin x}{2x} dx dy$

8. 求  $y = x^2 - 1 + |x^3 - 1|$  的反曲點。

9. 已知某商品的需求函數為  $26 - \frac{x}{8} - \frac{x^2}{64}$ ，且該商品的平均單位成本是  $8 + \frac{x}{16}$ ，試求 (1) 該商品生產多少件時，利潤最大；(2) 最大的利潤是多少？

10. 請舉出並說明兩個微積分可能可以用在企業管理的例子。

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## 一. 解釋名詞：(每題 4 分, 32%)

1. GNP
2. 存款準備率政策(reserve ratio policy)
3. 公開市場操作 (open market operation)
4. 恩格爾法則(Engel's law)
5. 短期停業點(short-term shut-down point)
6. 流動性偏好理論(liquidity preference theory)
7. 貨幣數量學說(Quantity theory of money)
8. 邊際報酬遞減法則(law of diminishing marginal return)

## 二. 計算題：(28%)

1. 假設法定存款準備率為 25%，則一筆 500 萬元的現金存入銀行，最後整個銀行體系總共可製造出多少的存款貨幣？(4%)
2. 在簡單凱因斯模型中， $C = 200 + 0.75Y$ ，其中  $C$  為消費， $Y$  為所得，假設  $Y = 2000$ ，那麼儲蓄為多少？(4%)
3. 在簡單凱因斯模型裡，假設邊際消費傾向為 0.8，那麼 2000 億的投資增加，將使所得增加多少億？(4%)
4. 有一獨佔廠商其總收益( $TR$ )及總成本( $TC$ )曲線為：
 
$$TR = 1000Q - 10Q^2$$

$$TC = 100Q + 5Q^2$$
 其中  $Q$  為銷售量，求利潤最大之銷售量及價格。(8%)
5. 設某依廠商之生產函數為  $Q = K^{\frac{1}{3}}L^{\frac{1}{3}}$ ，而資本 ( $K$ ) 和勞動 ( $L$ ) 的價格比為 4:1，求最低成本下之  $K/L$  使用量比。(8%)

## 三. 問答題 (40%)

1. 何謂重貼現率政策？為何說重貼現率政策具有宣示效果？(15%)
2. 根據所附文章 (25%)
  - a) 寫出本文章之大意。(300 字以內)
  - b) 請寫出你對本文章的評論。(300 字以內)

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## Taiwan No domino

TAIPEI

**T**HREE economies are vaunted as survivors of Asia's financial storm: Australia (which recently stopped pretending to be Asian), China (which cooks its books) and Taiwan. Not so fast. Not that Taiwan's financial system is about to fall prey to Asian-style contagion. But the island-state

shows plenty of Asian-style symptoms: slumping exports, high debt levels, deflationary pressures and a banking system infested by spivs and government cronyism.

Yet, until the middle of last year, Taiwan's economy had seemed to be sailing through the Asian turmoil. But then stormclouds appeared as exports slumped by more than 9% for the year as a whole, the first yearly decline in two decades. They will probably fall again in 1999; that matters in an economy where exports account for more than 40% of GDP. Domestic demand is now also sluggish, so GDP growth, which slowed to 4.8% last year (see chart), will almost certainly fall further in 1999: the Economist Intelligence Unit, a sister company of *The Economist*, forecasts 3.7%, a recession by local standards. Further, Taiwan appears to be flirting with deflation. In January wholesale prices fell by 10%.

Falling exports are hurting manufacturers, and through them the banks. As some loans have soured, bankers have panicked and called in others. Jitters have spread among depositors. Late last year a NT\$55 billion (\$1.7 billion) run on the medium-sized Taichung Business Bank led to a bailout by the government. As the credit crunch spreads, more such runs are likely.

The banks cannot blame all their woes on outside events. There are 25 new commercial banks that eagerly sought licences when the rules were liberalised in the early 1990s. Many lent in advisedly, often to their business affiliates. Much of the money went into property, so that Taiwan, with one of the highest rates of owner-occupancy in Asia (85%), still has nearly 1m unsold homes. Other loans went straight into the stockmarket. As it slumped from its mid-1997 high, so more loans went into default.

On paper, Taiwan's 48 commercial banks had about \$16 billion of non-performing loans at the end of 1998, about 4.5% of total assets. But that figure excludes bad loans by co-operatives and farmers' banks, which are certainly higher. Besides, the government, in a mild funk, last year let banks extend some bad loans for six months—so the true scale of their troubles will not be known until May.

Even if the bad-debt figures then look horrific, an Asian-style meltdown seems

unlikely. True, Taiwan now has one of the highest levels of private debt in Asia, equivalent to around 180% of GDP. But Taiwan has low levels of overseas borrowings, amply backed by around \$90 billion of foreign-exchange reserves. Further, its banks have capital-adequacy ratios comfortably above international norms; they are brimful of deposits; and many of their borrow-

ers are still world-beating exporters.

Clearly, however, there is room for the government to improve the health of the financial system. Whether it does so is another matter, for the structural flaws are of its own making. The ruling Kuomintang party, with its big-business interests, has long meddled in the markets—influencing lending decisions, propping up friendly banks and, late last year, setting up an \$8.7 billion stockmarket support fund. In another attempt to bolster the market to the benefit of party bigwigs and their business and banking cronies, Vincent Siew, the prime minister, last month backed plans to scrap Taiwan's share-transaction tax. So long as the government chooses to prop up the market instead of ending Taiwan's wilder financial practices, it will not shake off fears that the island might succumb to the Asian disease.

1. 一國家自然公園管理部門想知道生存在該公園內野兔數量，首先在公園內隨機捕捉  $n_1$  隻野兔，將之附上不易脫落的記號後立予釋放，隔數日再從園區內隨機捕捉  $n_2$  隻野兔，其中有  $m$  隻野兔為附有記號者，試估計該公園內現存野兔的總數。  
(15%)

2. 一自動系統 (system) 係由兩個不同性質且獨立作業的元件 I 和 II 所組成，當系統開始操作時，令  $X_1$  和  $X_2$  分別表示元件 I 和 II 的壽命長度的隨機變數，且知  $X_1$  和  $X_2$  的聯合機率密度函數為：  

$$f(x_1, x_2) = \begin{cases} \frac{1}{8} x_1 e^{-\frac{x_1+x_2}{2}}, & x_1 > 0, x_2 > 0 \\ 0, & \text{其他} \end{cases}$$
 (15%)  
 試求  $P(X_1 > 1, X_2 > 1)$

3. 由工廠的生產線上隨機抽驗 36 個成品，計算得樣本平均重量為  $\bar{x}$ ，如長期檢驗結果顯示有 5% 的  $\bar{x}$  值超過 2.1 磅；另有 5% 的  $\bar{x}$  值低於 1.9 磅，試求此生產線上產品的平均重量及重量的標準差。  
(15%)

4. 由已知  $\sigma = 10$  但母體分配未知的母體中，隨機抽出  $n$  個單位為一樣本，並以樣本均數  $\bar{x}$  作為母體均數  $\mu$  的估計量。若要求發生  $|\bar{x} - \mu| > 1$  的機率至多為 0.05，試求樣本大小 (sample size),  $n$ 。  
(15%)

5. 某公司新產品上市前進行試銷，以決定合理的價格策略。現以三種不同價格分派 15 家規模相當的商店試銷，得銷售量資料如下表：

價格策略	銷 售 量				
200元 (1)	36	42	38	39	35
220元 (2)	44	43	47	50	41
240元 (3)	43	39	40	40	38

試在  $\alpha = 0.05$ ，檢定不同價格策略之銷售量是否相同？  
(20%)

6. 一生產工廠的員工採早、中、晚三班制上工，工廠為瞭解生產品質的不良率是否與早、中、晚班有關，特隨機於早、中、晚班的生產品中各抽取 950, 945, 940 件，並將其為合格品及不良品分類整理成下表：

班制	品質	
	合格品	不良品
早班	900	50
中班	890	55
晚班	860	80

(20%)

試以  $\alpha=0.05$ ，檢定三班制所生產的產品的不良率有無顯著性差異？

\* 相關查表值：

- $F_{0.05}(3, 15) = 3.29$ ,  $F_{0.05}(2, 12) = 3.89$ ,  $F_{0.05}(3, 12) = 3.49$
- $\chi^2_{0.05}(2) = 5.991$ ,  $\chi^2_{0.05}(3) = 7.815$ ,  $\chi^2_{0.05}(6) = 12.59$
- $Z \sim N(0, 1)$ ,  $P(Z > 1.645) = 0.05$ ,  $P(Z > 1.96) = 0.025$

國立政治大學圖書館

**E**arlier this year, Kodak Chairman George M. C. Fisher looked unstoppable. The man who gained near mythic stature as CEO of Motorola Inc. wrote in the annual report that 1996 marked a "watershed" in his efforts to turn around one of America's most troubled brand names. "The picture at Kodak is clearly changing," an ebullient Fisher told shareholders.

Or so it seemed. After a series of cutbacks, layoffs, and restructurings going back to the start of the decade, Eastman Kodak Co. finally had some good news. The photography giant had gained market share in eight of its nine major businesses, and sales had grown 7%—a strong performance, by Kodak standards—to \$16 billion. Earnings for the year reached \$1.29 billion, more than double the level of 1994, Fisher's first year. That performance had powered the stock to a record high of 94 in January, a gain of nearly 80% since Fisher's arrival.

But suddenly, Fisher and Kodak are in deep trouble. On Oct. 14, Kodak will announce third-quarter results that can only be described as shocking, including an expected 25% drop in operating profits for the year and a free fall of 40% to 45% for the quarter. And far more painful bloodletting is certain on Nov. 11, when Fisher will meet with analysts to unveil a major restructuring.

The next few weeks, as Fisher and his team hammer out the details of that plan, will be among the most critical in Kodak's 118-year history. With pressure rising on Wall Street—the stock has since tumbled 33%, to 63—the pitfalls are many. Inside the company, Fisher needs to rally troops weary of bad news and fearful of layoffs that never seem to fix Kodak's fundamental problems. But to have any credibility with investors, the steps Fisher outlines on Nov. 11 must be decisive and substantial. "This is a critical point," Fisher concedes.

Problem is, Fisher still seems to have been taken by surprise by the depth of the company's problems. The issues that have dogged it—confused marketing, a bloated cost structure, intensifying competition from Fuji Photo Film Co., a strong dollar—have either been around for a while or could have been anticipated. And although Kodak has raised expectations about its mid-November announcement, Fisher told BUSINESS WEEK that he doesn't "expect to lay out the whole thing in November" (page 53).

**LOTS OF FAT.** For the past few weeks, Fisher says he and his staff have been furiously devising a plan to "significantly revamp our cost structure." He is seeking to cut both Kodak's manufacturing costs and to accelerate a five-year plan to slash overhead and administrative costs, which now stand at 27% of sales. He also needs to cut the payroll. Fuji's sales per employee, for example, are twice those of Kodak. In recent months, Fisher pushed out two of his top lieutenants, including the heads of the core consumer products and digital imaging units. And on Oct. 6, he cut loose 200 of the company's most senior 1,000 executives. Simultaneously, Fisher is vowing to take action to slow the loss of market share in the core color-film business to Fuji.

Yet even now, Fisher, who has long been averse to deep cost-cutting, seems reluctant to wield the ax. Asked about the cries on Wall Street that he cut Kodak's ranks by 10% to

- 一. 請條列並說明柯達在傳統影像事業面臨那些狀況 (issues)? 30%  
[條列狀況, 說明原因]
- 二. 請條列並說明柯達在數位影像事業面臨那些狀況 (issues)?  
[條列狀況, 說明原因] 30%
- 三. 如果你是 George Fisher, 你將採行那些行動, 以改善柯達的處境? 40%

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20%, he says, "I don't know how many of these people have ever run a company." But Kodak-watchers insist there's plenty of fat to cut. Wall Street is pressing Fisher to lay off as many as 20,000 of Kodak's 94,800 employees and cut \$1 billion from its \$4.5 billion in annual expenses. Fisher says he will closely look at cutting expenses elsewhere, possibly by outsourcing photo equipment now manufactured in-house, such as digital cameras and CD-ROMs. He may also exit stagnant businesses such as microfiche, microfilm, and copiers.

When Fisher joined Kodak four years ago, no one could have imagined he would be facing such serious problems this far into his tenure. After building Motorola into one of the country's most successful high-tech companies, Corporate America venerated him. In a comment that reflected the reverential attitude of the Kodak board, director and Coca-Cola Co. Chairman Roberto C. Goizueta said: "When we began this search, our No. 1 candidate was God, and we stepped down from that."

**"DISTRESSING."** But critics say Fisher has been slow to address Kodak's basic internal problems: a corporate culture mired in a mind-set left over from an earlier manufacturing age, and excessive costs. Rather than announcing a new era with tough layoffs four years ago and bringing in a new team to oversee the photo business, he decided to minimize cost-cutting in Kodak's traditional film business in the hope that digital revenues would grow enough to support it. "Everything that could go wrong has gone wrong," says one institutional investor with a big Kodak stake. "It's shocking and distressing."

In public, Fisher remains upbeat. "We are about halfway through where we need to be in the restructuring and turnaround of Kodak," says Fisher. In his first three years, Fisher sold off \$8.9 billion in non-core assets, including Eastman Chemical Co. and a copier business. That helped reduce the total head count by 14,000 and slashed Kodak's debt to \$1.5 billion from \$7.5 billion.

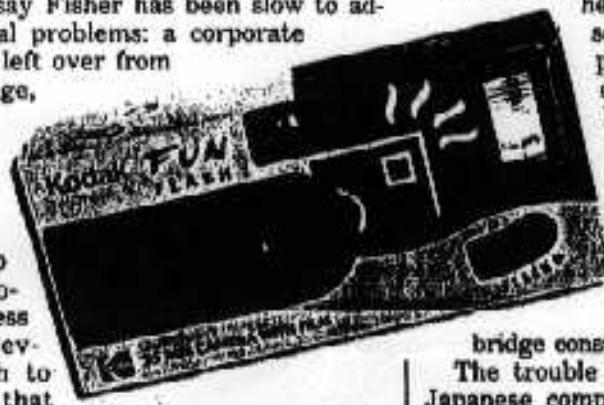
It will take stronger medicine than that, however, to restore Kodak to health. Despite Fisher's efforts, Kodak's overhead expenses, at 27.6% of sales, remain higher than those of most competitors. Meanwhile, the number of em-

## Kodak has poured \$500 million into digital imaging, with little to show for it. Questions remain about whether it will ever pan out

employees at continuing operations has climbed by 3,000.

At the same time, the company is being battered on all fronts by younger, more nimble competitors. From long before Fisher's arrival, the company's dream has been to use cash from the mature film business to fund an entry into a new, faster-growing arena. In the 1990s, the company looked to everything from drugs to copiers. None provided the growth engine Kodak needs. Fisher has pinned his hopes on digital imaging, where he's pouring some \$500 million a year into research and product development. So far, the payoff has been elusive. This year alone, the digital business will lose an estimated \$200 million. And while Fisher is still struggling to reinvent Kodak as a digital company, serious questions remain about whether that business—and Kodak's approach to it—can ever pan out. "To win at this game will require speed and flexibility—and that's not what I think of when I think of Kodak," says Robert I. Krinsky, principal at IdeaScape, a Cambridge consulting firm that counts HP among its clients.

The trouble is, Kodak faces ferocious competition from Japanese companies such as Sony and Canon, as well as Hewlett-Packard and other U.S. rivals more accustomed to the blistering pace of change in digital technology. And with dominant formats for things like image compression and low-cost photo-quality printers still emerging, building the business requires nerves of steel and a willingness to change course fast. Even as Fisher makes the attempt, Fuji has been aggressively slashing film prices and stealing share from Kodak, reducing cash flow when Fisher needs it most. **DOUBLE TROUBLE.** Trying to nurture growth in both the analog and digital worlds at the same time may be Kodak's greatest challenge. "Can Kodak balance the needs of their revenue- and profit-generating film business with their new investments in digital technology?" asks Antonio M. Perez, head of the consumer group at Hewlett-Packard. While HP is known for letting its divisions compete against one another to produce the strongest possible competitor, Kodak has taken care that its new digital products encroach as little as possi-

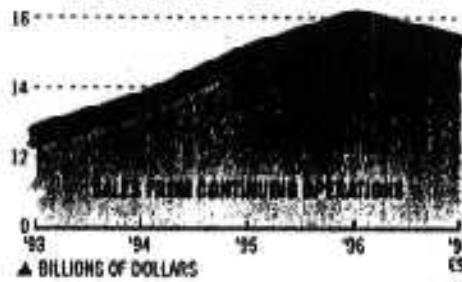


STOCK PHOTO

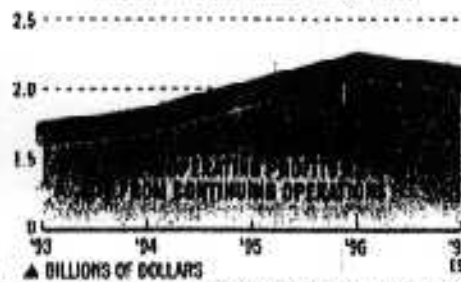
Film is still Kodak's bread and butter, but rivals such as Fuji are taking a big bite out of the business

### Fisher's Growth Plan Fizzles

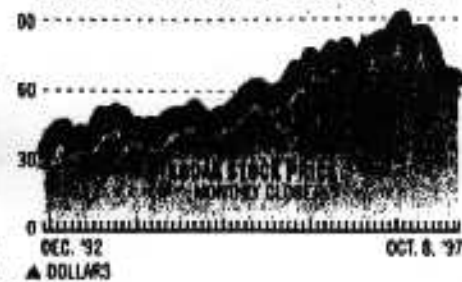
AS KODAK'S SALES SLOW...



...AND EARNINGS STALL...



...INVESTORS ARE LOSING FAITH



DATA: MORGAN STANLEY, DEAN WITTER, DISCOVER & CO.; BLOOMBERG FINANCIAL MARKETS

## 'WE ARE ABOUT HALFWAY THROUGH WHERE WE NEED TO BE'

By telephone from Rochester, N. Y., CEO George Fisher shared his perspective on Kodak's problems and its future with correspondents Geoffrey Smith and William C. Symonds.

**Q:** Did you expect Kodak to be in such trouble now when you took this job four years ago?

**A:** In a sense, yes, but in another sense, no. We are about halfway through where we need to be. . . . The first half of this thing was the easy part—restructuring and focusing on some fundamentals. . . . In that sense, we're pretty much on track. Halfway through the year—at the end of the second quarter—our return on net assets is running at 25%, while return on equity is 31% and after-tax profit is at 9%. Those are not bad measures compared to three or four years ago.

But [there were] two things that we didn't properly anticipate. No. 1 was the very significant and extremely aggressive pricing actions taken in the U.S. marketplace by Fuji. Those were more aggressive than we had expected by far. That is putting considerable pressure on our profits.

Second is the strength of the dollar. We did not anticipate that the dollar—and the relative values of the yen, mark, and pound—would be where they are. That will cost us \$500 million in sales and 45¢ [per share] in earnings.

**Q:** What are your long-term cost-cutting goals?

**A:** In a large part of the digital world, you need to run SG&A [selling, general, and administrative costs] around 15% [of sales], depending on the form of distribution. Now we're at 27%. I didn't say we would get the whole company down to 15%. But we had a plan to reduce this significantly over five years. What the events of this summer have shown us is that we don't have that time. So we are accelerating all our plans. By how much? [We'll] probably . . . accelerate it over one to two years.

**Q:** How large a charge will you take to earnings?

**A:** We haven't even decided to take a charge yet, so to say we are going to take one would be misleading. We are looking at what might be necessary in the way of a charge. We haven't reached any conclusions.

**Q:** What about suggestions you lay off 10% to 20% of the workforce?

**A:** I don't know how many of these people have ever run a company. They are looking at numbers and not

tant. In the short term, it probably won't yield that much. We feel confident we will get favorable judgments on major parts of this case. But the process is such that undoubtedly the Japanese will appeal this. They will drag us through that, and then, once they get the final decision, they have 15 months to implement it before we [the U.S.] can take unilateral action. So we are talking about a couple of years' process under favorable scenarios. We have never deluded ourselves that this is a short-term answer to the Japanese market.

**Q:** How do you feel about your progress in attacking Kodak's culture?

**A:** I think we could always get better. We've made a lot of improvement. . . . But the ability to change quickly in light of quickly changing market conditions remains a big issue for this company.

**Q:** What are your growth goals for Kodak, going forward?

**A:** It depends on pricing pressures and [the dollar]. But with the growth initiatives we now have under way, I think long term we can meet the 10% annual earnings per share growth rate, year over year. That will take some reasonable growth. I'm still pretty confident we can get there. I am including this year in that average. That means we'll have some good years and bad years. But even with a 25% decline [this year], on average we'll meet our commitments and have enough revenue growth to have 10% EPS growth.

**Q:** How soon will digital become profitable?

**A:** The narrow digital business—digital cameras, CD-ROMs, and some digital printers—did not meet the end-of-year target as a result of a collapse in CD-ROM prices. We didn't expect that and we should have. When are we going to make money? I'm not going to guess at that.

For a complete transcript of this interview, go to [www.businessweek.com](http://www.businessweek.com) or America Online: Keyword: BW.



**FACING FACTS** "We will do whatever we have to do to be healthy"

— GEORGE FISHER

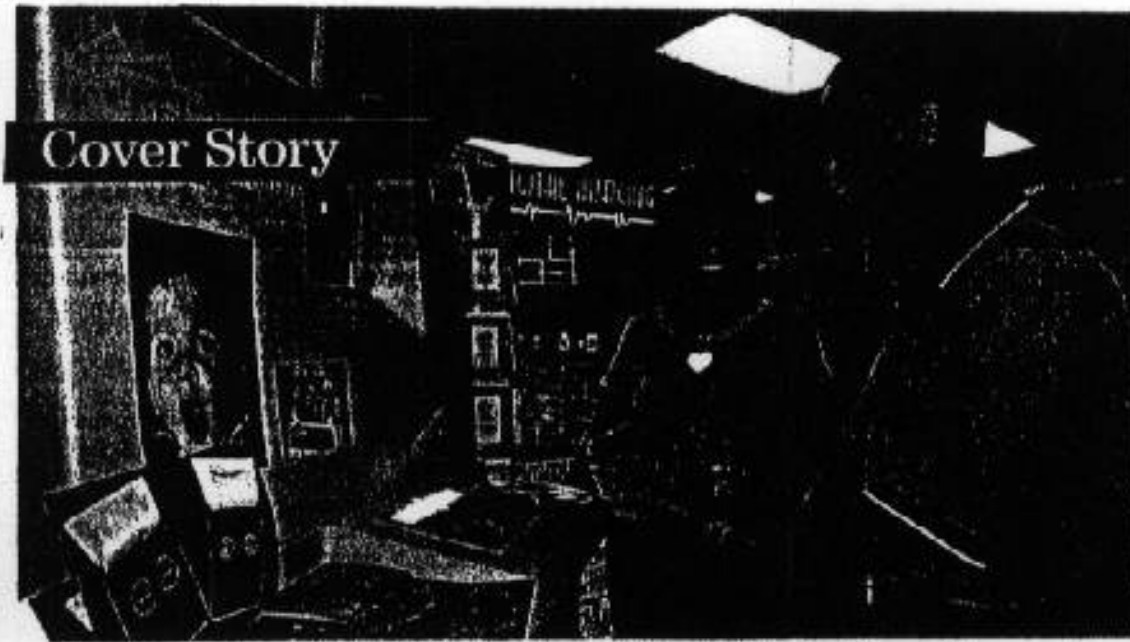
looking at running the business. We will do whatever we have to do to be healthy and still have a healthy future. We are very mindful of the need to reduce costs.

**Q:** Some of your critics say your problem is you're too much of a nice guy.

**A:** We have made some very hard decisions. I don't know of very many companies who have restructured the way we have and sold off major chunks of the business and taken out 15,000 people. So we have done some awfully hard things, and the employees have been very resilient. Some people lose sight of what we have done. Having said that, I am a nice guy and I hope I remain one.

**Q:** How important is the WTO case?

**A:** In the long term, it is very impor-


**KNOWLEDGE OF YOURSELF**

In-store kiosks will let shoppers print out and manipulate photos—but rival systems allow them to do so at home.

word out, the system, which combines old-fashioned silver halide film with some digital features, might still be a bust. Kodak says APS units now account for 20% of point-and-shoot-camera sales. But retailers say its potential is limited. Photo buffs are turning to digital cameras, while the

ble on its film business. Donald W. Strickland, president and CEO of PictureWorks Technology Inc. and Kodak's former vice-president for software, says there's no doubt about the quality of Kodak's technology. But he says that "the fear of cannibalization always slowed things down."

It's now clear that the expectation that Fisher could somehow magically transfer his successes at Motorola to Kodak was naive. The two companies are radically different organizations, at far different stages of development, and facing far different challenges. Fisher did "a terrific job of keeping Motorola on the leading edge of technology," says Robert Duncan, a professor at Northwestern University's J. L. Kellogg Graduate School of Management. Most important, he pioneered cellular telephones and pagers, turning them into must-have products for millions.

Fisher had hoped for a similar hit at Kodak. "I'd bet we have at least one home run of the sort Motorola hit in cellular phones," he told BUSINESS WEEK in January, 1995. But so far, Fisher has nothing more than a single or two—despite an investment of billions in product development. In part, that's because Kodak is operating in a sharply different marketplace. Motorola thrived by developing new technology that provided clear, significant advantages over old products—and often sold it first to business, where price was less of a concern.

**CONFUSION.** But Kodak is a consumer mass-marketer. Competition is fiercer, and consumers can be more finicky about adopting pricey new products. And despite its history as one of the world's best-known brands, Kodak lately seems increasingly out of touch with its customers. It has so far sunk \$500 million into launching a film and camera system known as Advantix. Manufacturing glitches left retailers short of products, while a confusing ad campaign never explained to consumers why they should buy Advantix. But even if Kodak had done a better job of getting the

rest of the market seems happy with 35mm.

The marketing has not been any better on the digital side of the business. There, products have suffered from "an absence of marketing" rather than bad marketing, says Shelly Lazarus, CEO of Ogilvy & Mather Worldwide Inc., which recently won most Kodak advertising. It's a damning oversight for a brand-name marketer like Kodak. "We don't yet know what the potential is," says Lazarus.

**CRUCIAL CASE.** Fisher is also dealing with a far more ingrained and bureaucratic culture at Kodak than he ever faced during his days at Motorola. Although he has taken steps to shake things up—such as instituting pay for performance standards—the old-line manufacturing culture continues to impede Fisher's efforts to turn Kodak into a high-tech growth company. "Fisher has been able to change the culture at the very top," says one industry executive. "But he hasn't been able to change the huge mass of middle managers, and they just don't understand this [digital] world."

Trade policy is an area in which Fisher's Motorola expertise seemed transferable. At Motorola, he successfully lobbied Washington to help open up the market for Motorola's products in Japan, while combating Japanese dumping here at home. Soon after arriving at Kodak, he launched a similarly aggressive effort to pry open the \$2.8 billion Japanese market for film and paper, where Kodak still has only a meager 10% share, vs. 70% for Fuji. Fisher argues Fuji's dominance has enabled it to treat Japan as a "profit sanctuary" from which it can fund its assault on the rest of the world.

Fisher has maneuvered this dispute to the top of Washington's trade agenda. At his urging, the U.S. has filed a case before the World Trade Organization alleging that Japan has thrown up numerous hidden barriers to the sale of foreign film, even while cutting official duties on imports. With the WTO decision expected in early Novem-

## Getting the Focus Back

*What the experts say Fisher needs to do:*

### PROTECT MARKET SHARE

Protect market share from Fuji, with smarter promotions, cross-marketing in the U.S., and stepped-up overseas expansion

### FOCUS ON SIMPLER PRODUCTS

Narrow the focus to simpler products for consumers

### FORGET THE FUZZY

Forget the warm-and-fuzzy Kodak moment for new products. New campaign due shortly needs to give reasons to choose Kodak

### BUY A BRAND-NAME

Buy a brand-name consumer-electronics company to help smooth the transition to digital

### REDUCE COSTS

Costs remain higher than rivals'. Wall Street wants layoffs of up to 20,000, though Fisher may announce less than half that

### SPIN OFF MARGINAL BUSINESSES

Spin off marginal businesses such as microfiche and microfilm and outsource production where possible

### INSTILL A SENSE OF URGENCY

Instill a sense of urgency and mission and slash the bureaucracy