THE NEW LASER SCANNING SYSTEM

CONCEPTS NEEDED:
F. W. Taylor, Remuneration, Motivation

When the laser scanning system was first mentioned, Suzanne felt the same sense of mild anticipation as the other check-out staff. The management explained that because it would do away with individual item pricing, it would prevent friction with customers over missing or incorrect prices. Furthermore, the fact that it was modern technology might make it easier to get another job in the future.

The first moment of doubt came when she overheard managers discussing 'IPMs'. The Store Manager was telling the Human Resources Manager that:

'*Three of the staff are so far down on their IPMs that they're dragging the store average down. You must sort them out.*'

It soon became clear that IPM stood for Items Per Minute, and that the computerised tills not only checked out groceries, but also checked on staff. When managers realised that information was spreading on the grapevine, they called a meeting to explain how this information was to be used. All the staff were given a copy of the computer print-out from the previous week, as shown opposite.

In the lead up to the changeover, all the staff went on a two day training course. This was interesting and gave Suzanne a chance to get to know her fellow workers far better than ever before. So by the time it was installed, her attitude to the system was very positive. This was strengthened further in the early weeks, when managers came round regularly to ask her how it was going, and when customers chatted about their likes and dislikes of the high speed service.

Week 4 Summary of check-out operator productivity (rear of store operators only)

Operator	Hours worked	Total items	Average IPM	Operators' variance from their average	
				IPM in best hour	IPM in worst hour
Trudy S.	22	31,680	24	32	17
Simon G.	36	38,880	18	33	13
David W.	14	14,280	17	23	14
Tracy F.	35	52,500	25	30	21
Sonal S.	35	48,300	23	26	20
Suzanne P.	18	31,320	29	38	22
Jane H.	35	40,000	19	23	16
Steve H.	20	25,200	21	27	17
Eileen L.	38	57,000	25	36	16
Mutlu M.	24	31,700	22	34	13
AVERAGE	27.7	37,060	22.3	30	17
UK AVERAGE	24.5	36,450	24.8	30	20

The 10 check-out staff were told that head office set a minimum IPM target of 22 per head. Any who failed to achieve this would be retrained, moved to other duties, or be asked to work extra hours. Steve asked if there was any way the till could give them a running score of how they were doing, but apparently there was not. At the end of the session, the Human Resources Manager asked Jane, Steve, Simon and David to stay behind.

Suzanne was pleased to see how well she had been doing, and wondered whether the company might introduce a bonus scheme based upon IPM performance. She did feel disturbed, though, to think that this clever monitoring device had been sprung upon them. What came as a shock, however, was the pressure she found herself under at break time. Steve and Simon (both students at her college) told her bitterly that their performance had been compared directly with hers. Simon finished off by saying:

'*What are you doing it for? They're making massive enough profits anyway. You ought to stop crawling and think of your mates.*'

Over the following weeks Suzanne tried to slow down her workrate, but she found this surprisingly hard; she preferred to work at her natural, fast pace. Nevertheless, anything was preferable to poisoning her relationships with her work and college friends.

After four weeks, Steve and Simon had pushed their productivity level up to 22, while Suzanne's had slipped back to 25. The store managers held another meeting, though, because they were getting pressure from the Regional Manager to boost the IPM score up from the 22.8 level it had now stabilised at. The Deputy Store Manager showed clear signs of stress as he shouted:

'*We've flogged ourselves sorting out all the teething problems with the new system. You don't know the half of it. All you have to do is to work reasonably hard. We're the ones with the hassles – don't make me pass them on to you.*'

As Suzanne's productivity slid back up towards the 30 IPM level, she began to realise how much her back ached after a busy Saturday. During a dull Geography lesson the following Monday, she scribbled some numbers down on paper.

Saturday hours
8.30 – 12.15 am = 3¾ hours
1.00 – 3.15 pm = 2¼ hours
3.30 – 6.00 pm = 2½ hours
_____
                8½ hours

8½ hours × 60 mins = 510 mins
510 × 30 IPM = 15 300 items
15 300 × (say) ½ lb = 7650 lbs
7650 lbs = 5.3 tons a day!
5.3 tons lifted for wages of £32.30!

Over the following months several of the original staff left. Many complained about back pains; some also said that migraines were ruining their evenings. All felt that the scanning machines had made their job even more repetitive than before. With new, inexperienced staff being recruited, the IPM average for the store worsened. The Deputy Manager began to pressurise the older hands to work more hours; and when Steve slipped back to an IPM of 19 in the week of his mock A level exams, the same manager bellowed at him. It was all too much; Suzanne handed in her notice that night.

Questions
(60 marks; 70 minutes)

1 Analyse the mistakes, if any, you believe the store management team made. **(9 marks)**

2 How might a follower of F.W. Taylor view this introduction of laser scanning? **(12 marks)**

3 Analyse how managers with a more people centred approach might have made use of the IPM summary table. **(12 marks)**

4 Discuss Suzanne's thought about basing a bonus scheme on IPM performance. **(15 marks)**

5 Apart from monitoring productivity, the computers controlling the scanning check-outs provide daily print-outs of the number of sales of each of the 8,000 lines stocked. They also pass this information on to the head office mainframe computer that shows national figures and trends. Examine the use management might make of this information. **(12 marks)**