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BUSINESS

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Paper 3 Case Study

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INSERT

3 hours

INFORMATION

- This insert contains the case study.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.



This document has **4** pages.

Fashion Frames plc (FF)

FF makes plastic frames for glasses (spectacles) in a factory in country W, in South East Asia. FF sells its plastic frames to wholesale businesses that market well-known brands of plastic frames which they sell globally. The wholesalers reject 7% of the frames supplied by FF because of substandard quality. The FF design team create dynamic styles based on the demands of the wholesalers. Meeting delivery times is very important. FF only delivers 85% of its sales on time. FF needs to improve this percentage. 5

Improving quality

Chang, the production manager, aims to reduce the high level of rejects by the wholesalers. He has identified a number of factors which make this difficult including:

- employees know that rejected frames can be recycled 10
- production targets are very difficult to meet
- problems with suppliers of raw materials
- breakdowns with machinery.

Chang proposes introducing Total Quality Management (TQM). He thinks this will reduce the number of substandard frames and improve FF's delivery times. Chang forecasts successful implementation of TQM will also increase output by 10% and average variable cost will fall by 5%. However, Chang is aware that there may be problems with TQM and forecasts can be inaccurate. Table 1 shows information on FF's output, costs and prices, before TQM is implemented. 15

Table 1: FF's output, costs and prices

	Year ending September 2021
Maximum capacity	16 million frames
Actual output	14 million frames
Average variable cost	\$20
Average selling price	\$40

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Communication challenges 25

FF has a centralised organisational structure with a low degree of delegation. Directors make decisions, department managers plan how to implement these and supervisors give instructions. Employees have little responsibility or control. FF has provided good pay, good conditions of work and security of employment. However, employees are aware that the directors are considering significant changes to working conditions. All employees find it difficult to discuss this with their line managers. Many employees work alone so information is passed on informally and often inaccurately. This uncertainty has begun to lead to dissatisfaction, complaints, higher absence rates and lower productivity. 30

Privatisation of electricity and water industries

In country W, state-owned businesses supply all electricity and water. Prices of services in these industries have risen at above the rate of inflation for the last three years. Sometimes, electricity supply is interrupted and FF finds it difficult to obtain information about reconnection. Water quality is variable. The government has announced it intends to privatise these industries in the next three years, to improve these services. 35

Buying 3D printers

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3D printers that make frames for glasses as part of a CAD/CAM process are becoming available. Chang is considering whether FF should invest in this rapidly developing technology. 3D printers have a guaranteed life span of four years but he believes they are probably usable for six years. There is no way of accurately estimating their value after four years. The directors have told Chang that an acceptable accounting rate of return (ARR) is 5%.

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Chang thinks new 3D printers will increase FF's long-term profitability. The 3D printers will result in significant reductions in employee costs and waste and substandard reject costs. Maintenance and training costs will, however, increase. Table 2 and Table 3 show some of Chang's research.

Table 2: Investment appraisal for 3D printers: cash flow forecasts \$m

	Year 0	Year 1	Year 2	Year 3	Year 4
Buy printers	(10)				
Increased maintenance costs		(0.1)	(0.1)	(0.1)	(0.1)
Increased training costs	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Employee cost reductions		2.1	2.1	2.1	2.1
Waste and reject cost reductions		0.8	0.8	0.8	0.8
Net cash flow	(10.2)	2.6	2.6	2.6	2.6

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Table 3: Discount factors at 5% discount rate

	Year 0	Year 1	Year 2	Year 3	Year 4
Discount factors	1.000	0.952	0.907	0.864	0.823

There are risks that this technology might be replaced in future by even more advanced process innovations but Chang is keen to invest in 3D printers. He knows competitors are considering buying them.

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Product development and marketing

The marketing manager is concerned that FF relies only on specific orders from wholesalers for plastic frames. He proposes that FF should use product development to design and manufacture metal glasses frames. These would be marketed to wholesalers and directly to businesses who sell glasses with globally recognised brands. FF would have to acquire new skills and equipment in order to design and manufacture metal frames. The marketing manager visited international trade fairs and found that several competitors have research and development (R&D) departments.

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Strategic choice: enter the Asia Pacific retail market

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The Chief Executive Officer (CEO) states: 'My strategic analysis shows that FF must continue with the current business model but should take a new direction as well. My strategic choice is that FF should enter the retail glasses market in the Asia Pacific region. This will mean selling our own glasses in retail shops. We will need to work closely with lens manufacturers. Increased eye strain and higher disposable income are driving the increasing demand for higher value glasses. We could use the Ansoff Matrix to help analyse the link between this business strategy and risk. There are several approaches we could use to enter this new market.'

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The CEO illustrates his proposal with Table 4 and Table 5.

Table 4: Retail glasses market entry decision tree analysis

Regional market	Expected monetary value
North America	+ \$3m
Europe	+\$4m
Asia Pacific	+ \$14m

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Table 5: Retail glasses sales data

	Total sales 2021 (\$bn)	Forecast sales growth 2021–2025 (%)
North America	37	8
Europe	39	8
Asia Pacific	35	10
Rest of world	8	14

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Managing a change to team working

FF currently produces frames on production lines. There are nine stages in the production process, including cutting out plastic sheets, smoothing component parts, attaching them, and final shaping and polishing. Employees only carry out the one task they have been trained for in the production process. 95

The Directors are considering a proposal from Chang to move to team working. A team would be responsible for the whole production of a product and would take all necessary decisions. If successful, FF could possibly reduce the lead-time from order to completion by 60%, inventory levels by 27% and increase productivity by 20%. A change to team working means greater delegation and less centralisation. Control, authority and trust involving directors, managers, supervisors and production employees will have to change. This strategic change must be managed effectively and directors are confident that Chang has the necessary theoretical knowledge. The benefits he identified will only be achieved if he applies the correct techniques to manage the introduction of team working. 100 105

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