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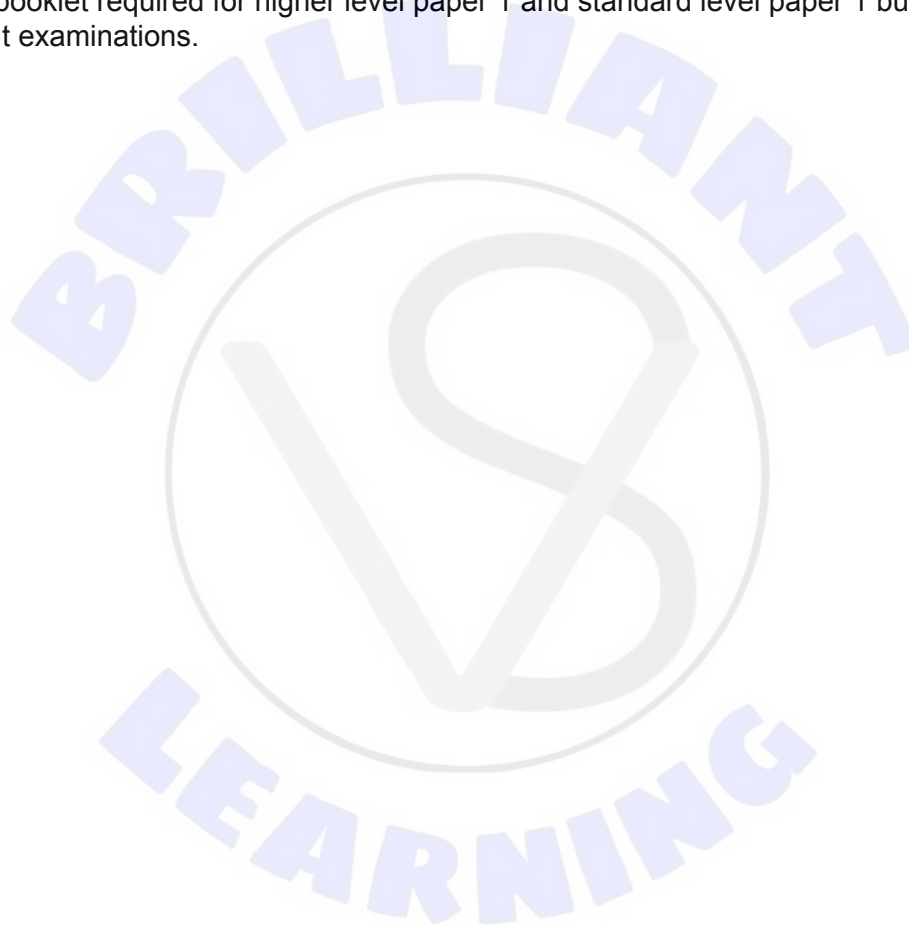
Business management

Case study: Brondy's PLC

For use in November 2023

Instructions to candidates

- Case study booklet required for higher level paper 1 and standard level paper 1 business management examinations.



Brondy's PLC

Brondy's PLC (BRD) began manufacturing wind-up clockwork toys in 1930. *BRD* was initially founded as a private limited company by Geoff Brondy, a skilled engineer and entrepreneur, in Liverpool, United Kingdom (UK). *BRD's* product range included clockwork cars, lorries, motorbikes, trains, animals, and novelty items – one of its biggest sellers in the 1930s was a toy monkey
5 playing a drum kit.

During the Second World War, toy production at *BRD* was suspended and the factory was used to make rifles for the army. Once the war was over, however, Geoff discovered that the toy market had changed. Consumers now wanted more sophisticated toys, and the era of the clockwork toy was ending. In 1954, Geoff visited a toy fair in New York, United States (USA), and saw the interest
10 that electric slot cars¹ and electric model train sets generated among the other visitors.

Geoff returned to Liverpool to begin designing new products that would take *BRD* forward, and his first two designs went into production in 1955:

- A slot car racing set, consisting of a track and two sports cars. He chose the brand name *BRD Slotcars*. Sales of *BRD Slotcars* rose quickly in the UK and other countries in the
15 Commonwealth of Nations.
- A model train set, consisting of an engine and four carriages. This set had a three-rail system, rather than the two rails Geoff had seen in the USA. In Geoff's design, the middle rail supplied the electrical power to the model trains, and this feature became part of the product's brand name, the *BRD Three-Rail Model Railway*. This brand sold well in the UK, Australia, and New Zealand.
20 Sales in the USA and Canada, however, were very low, as the product was not compatible with the model train sets produced in those countries, where the two-rail system was used.

Geoff retired in 1985 and became a minority shareholder, passing on most of his share capital to his son, Arnold Brondy. Arnold became the chief executive officer (CEO). Arnold shared his father's passion for toys. Ideally, he would have preferred *BRD* to focus on one product only – model trains –
25 but realized that if *BRD* was to prosper, diversification was needed. An issue, however, was that interest rates at that time were very high.

Arnold persuaded *BRD's* board of directors to agree to a conversion of *BRD* to a public limited company. He also aimed to broaden *BRD's* product range through acquisitions. The sale of share capital in *BRD* helped finance these acquisitions.

30 In 1990, *BRD* took over two companies:

- *Matchfix PLC*, a manufacturer of plastic model kits of aircraft and military vehicles, with sales across the world. This business' factory was in Wales, UK.
- *Enam Ltd.*, a paint manufacturer whose paint was used by modellers across the world. This business' factory was in France.

35 Arnold valued efficiency and productivity. In 2001, *BRD* closed *Matchfix's* factory in Wales and moved production to the *BRD* factory in Liverpool. At the same time, *BRD* merged the *Matchfix* and *BRD* design departments. A single Design Department, based in the Liverpool factory, became responsible for the design of model train sets, slot car racing sets, and plastic model kits. The *Matchfix* brand name was retained.

¹ electric slot cars: powered miniature cars and other vehicles that are guided by a groove or slot in the track on which they run

40 **Production methods in *BRD*'s Liverpool factory in 2023**

BRD model train sets are currently manufactured using batch production. Each train set consists of three components: a train engine, coaches, and a set of tracks. Co-ordination is proving difficult, however, and production targets for each component are not always met for a variety of reasons, including employee absence, machinery problems, and communication issues. As a result, the
45 daily dispatch of train sets to retailers had to be postponed approximately three times a month in 2022, as complete train sets could not be assembled. *BRD* is considering changing to cellular production for its model train sets. This would require production to be halted for two weeks, and additional employee training would need to be provided to make employees multiskilled. Employees would also be split into teams, called cells. The workday would be changed to
50 incorporate daily 30-minute cell meetings, timetabled during normal working hours. Each cell would be responsible for producing one train set component, and the team of employees in a cell would work at a single workstation using parts delivered to that station by automated delivery vehicles.

The *Matchfix* plastic model kits are manufactured in a separate part of the Liverpool factory and also use a batch production method. Cellular production for the model kits is not being considered,
55 as production targets are consistently met and the production process makes greater use of specialized machinery than the production of the *BRD* model train sets.

Human resources at *BRD*'s Liverpool factory in 2023

BRD's CEO, Arnold, is proud of his relationship with the Liverpool factory employees. He tours the factory floor for an hour every morning. Arnold can guarantee that he speaks to each of the
60 107 production employees at least once every two weeks. He knows them all by name and prides himself on knowing their family situations. He also keeps a record in his office of staff birthdays and makes a point of giving a card and small gift on an employee's birthday. Many of the production employees in the Liverpool factory have worked there for over 20 years. Absenteeism and labour turnover are very low by industry standards. *BRD*'s employees have never taken industrial
65 strike action. However, Arnold has been slow at updating the factory employees' contracts of employment. These contracts only provide the statutory minimum benefits for employees who are absent due to illness or those who need to take parental leave following the birth or adoption of a child. The salaries of all employees rise automatically by 3% after every three years of employment. Employees in the Production Department do not receive any fringe benefits. In
70 contrast, employees in the Design Department have a range of fringe benefits, including a car allowance, subsidized meals, and private health care. They also have flexible working practices and can choose to work from home two days a week.

Although employees in the Design Department have set tasks to complete, for one month each year they can pursue individual design projects that interest them and that may be useful to *BRD*.
75 This month is known within the company as Design Team Freedom Month. Every year, each member of the Design Department is given responsibility for the design of one new model train set, slot car set, or plastic model kit. Their role is to manage a design from its initial concept, through the design stage, and into production, solving any design and production issues in collaboration with the production director. Arnold also meets with the employees in the Design Department every
80 two weeks to hear their views on progress in the company and listen to their ideas for the future.

The *BRD* Three-Rail Model Railway, 1955–present

BRD's model train sets are made from metal. The tracks, on which the model trains run, have three rails, with the centre rail carrying the electrical current. Competitors in the USA and Europe use a two-rail system. This has protected *BRD* from foreign competition in the UK market, as model railway engines made abroad are not compatible with *BRD*'s three-rail system. However, it has also limited *BRD*'s market reach, as its model trains cannot run on the two-rail systems made by their rivals in the USA and Europe.

BRD's customer base initially included railway modellers, who were usually male and who valued accurately made and well-designed models. Targeting this niche market enabled *BRD* to charge higher prices than foreign manufacturers for its model train sets. *BRD* also sold its train sets to parents who wanted toys for their children, but the high prices restricted sales to wealthy families.

In the final quarter of the 20th century, most model train manufacturers across the world replaced metal with plastic where possible, but *BRD* did not. *BRD*'s board of directors were convinced that quality and realism were more important than price, so they continued using metal as the primary material. *BRD*'s products became significantly more expensive than similar two-rail train sets made by rival manufacturers. *BRD* had a loyal customer base, but this base was getting progressively older, and sales fell year after year from 2010. By 2020, *BRD*'s share of the UK market had fallen from a peak of 60% in 2001 to 20%. Sales to consumers in New Zealand and Australia followed a similar pattern.

During the last Design Team Freedom Month, Julia Dentes, a member of *BRD*'s Design Department, used a three-dimensional (3D) printer to produce working prototypes of five different versions of one model train set in plastic. This took less time than it would have taken to produce just one model train set in metal, and it was less expensive. Julia also showed that it was possible to achieve the same level of detail and realism using plastic as by using metal. Julia's department head was so impressed with her work that he arranged for Julia to make a presentation to *BRD*'s board of directors.

The directors were equally impressed. However, some directors had misgivings because the plastic used was not yet recyclable. Despite these misgivings, the board agreed to make a fundamental change to *BRD*'s model trains: from 2024, they would be made from plastic rather than metal.

Financial performance

By 2022, *BRD*'s finances were in a critical situation. Sales of plastic model kits and model train sets began to fall at the start of the century, and the pace of the decline in sales increased every year from 2015. *BRD*'s own primary and secondary market research suggested there were four reasons for the falling sales:

- A decline in the customer base for *BRD*'s metal trains and plastic model kits; *BRD*'s customer base was ageing, and they were not being replaced sufficiently by younger ones.
- A general lack of interest in modelling as a hobby due to the advancement of the online games industry.
- The prices charged for *BRD*'s train sets were uncompetitive.
- An increase in customer complaints about quality issues with *Matchfix* plastic model kits.

BRD's shareholder confidence fell, and its share price dropped by more than 50 % in 2021. Following this fall, *4Change*, a private equity business², purchased 20 % of *BRD*'s shares.

- 125 In 2022, *BRD* suffered a liquidity crisis caused by the falling sales of its model train sets and plastic model kits. *BRD* had not reduced production, resulting in unsold stock in its Liverpool factory valued at £6 million. This led *BRD* to seek a financial rescue package. However, *BRD*'s bank refused to extend its overdraft, which now stood at £8 million. Suppliers were beginning to panic, and one key supplier of materials cancelled *BRD*'s 30-day trade credit facility, insisting on immediate payment for each order.
- 130 *BRD*'s board decided to offer existing shareholders the right to buy an extra share for every five shares owned. This offer was intended to raise £15 million from shareholders to stabilize the business. Many of *BRD*'s shareholders turned down this offer, however, and *BRD* only raised £3 million. *4Change* stepped in and offered to buy the £12 million of unsold shares at a 25 % discount. *4Change* also insisted that it be given three positions on the board of directors. *4Change*
- 135 was determined to exert more influence over *BRD*'s strategic decision making. As CEO, Arnold was reluctant to accept this offer, as he feared the direction that *4Change* might want *BRD* to take. However, the board of directors voted to accept this offer. *4Change* now owned 35 % of *BRD*'s shares.
- 140 2023 will be a crucial year for *BRD*. The £12 million raised from the sale of share capital gave *BRD* sufficient liquidity to continue trading, but further strategic changes will be needed if *BRD* is to avoid more difficulties in the near future.

² private equity business: an investment management business that provides financial backing and makes investments in operating companies

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