

**1 Background**

XS Gaming Ltd ('XS') is a South African company listed on the Johannesburg Stock Exchange (JSE). The company has operated in the gaming industry for 30 years. It develops and publishes several award-winning video games across multiple platforms, and has a newly established product offering in mobile gaming. The company has grown both organically, by producing its own new games and content, and by acquisitions, by acquiring smaller game development companies. The strategy of the company is to develop its own games, but it has found that often the most efficient way to recruit the best developers is to acquire smaller companies in the industry that have these skills.

During the last few years, the company has experienced accelerated growth, mainly because of the Covid-19 pandemic lockdowns, during which interest in gaming grew substantially. XS anticipates that this growth will continue following the increased popularity of gaming as a source of recreation.

Recent studies have estimated that the global gaming market was worth United States dollar (USD) 202,7 billion in 2022, and is expected to hit USD312 billion by 2027. Estimates are that it will grow at a compound rate of 7,9% over the period before it reduces to a growth rate of 2% per annum from 2028 onward. Virtual reality enabled games are leading the industry as they provide a more interactive user experience. According to recent industry reports, the mobile gaming segment is bound for explosive growth and is expected to surpass both console and PC gaming.

**2 Company performance**

The company has always had significant costs for research and development for its products and has previously had negative cash flows before financing activities. However, the revenue has increased significantly, which has allowed the research and development costs to be covered comfortably. This has enabled the company to reduce its debt to much lower levels, and allowed it to pay substantial dividends from excess cash. The company consequently has lower net debt levels due to a significant cash surplus.

The following are extracts from the statement of financial position and the statement of profit or loss for the 2023 financial year (FY2023):

<b>XS Gaming Ltd</b>		
<b>Statement of financial position as at 30 June</b>		
	<b>2023</b>	<b>2022</b>
	<b>R'000</b>	<b>R'000</b>
<b>Assets</b>		
<b>Non-current assets</b>		
Property, plant and equipment	114 627	113 300
Goodwill	64 286	81 206
Intangible assets	368 429	245 336
Investment in subsidiary	40 126	45 714
	<b>587 468</b>	<b>485 556</b>
<b>Current assets</b>		
Inventories	246 321	205 238
Trade receivables	102 128	108 506
Cash and cash equivalents	382 164	160 098
	<b>730 613</b>	<b>473 842</b>
<b>Total assets</b>	<b>1 318 081</b>	<b>959 398</b>
<b>Equity and liabilities</b>		
<b>Equity</b>		
Share capital	100 000	100 000
Retained income	683 586	442 310
Total equity	<b>783 586</b>	<b>542 310</b>
<b>Non-current liabilities</b>		
Shareholders' loans	50 000	50 000
Interest-bearing borrowings	122 000	147 000
	<b>172 000</b>	<b>197 000</b>
<b>Current liabilities</b>		
Trade and other payables	89 880	97 766
Deferred revenue	215 959	54 392
Short-term loan	28 220	32 510
Income tax payable	28 436	35 420
	<b>362 495</b>	<b>220 088</b>
<b>Total equity and liabilities</b>	<b>1 318 081</b>	<b>959 398</b>

<b>XS Gaming Ltd</b>		
<b>Statement of profit or loss for the year ended 30 June</b>		
	<b>2023</b>	<b>2022</b>
	<b>R'000</b>	<b>R'000</b>
<b>Revenue</b>	985 669	667 283
Operating expenses (includes research)	(491 864)	(367 005)
Other income	14 695	16 321
Impairment	(12 425)	(15 558)
Depreciation	(13 275)	(11 250)
Finance costs	(3 578)	(3 375)
<b>Profit before tax</b>	479 222	286 416
Taxation expense	(134 182)	(80 196)
<b>Total profit for the year</b>	345 040	206 220

Total dividends paid amounted to R103 764 000 in FY2023 (R72 128 000 in FY2022).

### **3 Acquisition opportunity**

The chief operating officer (COO), Ms Kendra Nala CA(SA), has identified growth in the mobile gaming segment, particularly as it relates to the development of virtual reality applications and games, as an area of expansion for the XS product offerings. She has determined that XS's current staff lack the skills required to develop the mobile virtual reality products. She therefore proposed that another company be considered as an acquisition to obtain these skills and staff. Kendra has identified a competitor, Metaverse Solutions (Pty) Ltd ('Metaverse') that has developed much of this technology over the last two years. Kendra has determined that XS would be able to acquire an 80% shareholding in Metaverse from a private equity shareholder, with the founder retaining 20%.

The main product offering of Metaverse is 3D-Land, a platform on which developers and creators can build and host 3D experiences and games for its virtual community. This platform currently generates most of the company's revenue because other developments are still in progress. Although the products of Metaverse are of interest to XS, its main interest is the entity's technology and skills which could be applied in XS's current business, to enhance its product offerings and create new products.

The following free cash flow valuation as at 30 June 2023 was performed by XS's financial director to evaluate whether the company should purchase 80% of Metaverse. His objective was to determine the total value that Metaverse could provide to XS.

<b>Metaverse Solutions (Pty) Ltd</b>					
<b>Forecast financial information</b>					
<b>for the year ended/ending 30 June</b>					
	Notes	<i>Actual</i>	<i>Actual</i>	<i>Forecast</i>	<i>Forecast</i>
		2022	2023	2024	2025
		R'000	R'000	R'000	R'000
Revenue	1	94 963	63 742	66 929	70 275
Cost of sales	2	(59 675)	(58 881)	(42 058)	(44 161)
Gross profit		35 288	4 861	24 871	26 114
Selling, general and administrative expenses	3	(12 249)	(10 122)	(11 303)	(11 868)
Gain/(loss) on foreign currency		(1 863)	1 290	(900)	(900)
Profit before interest and taxation		21 176	(3 971)	12 668	13 346
Other income	4	3 012	3 839	3 839	3 839
Finance cost		(1 523)	(1 556)	(1 556)	(1 556)
Profit/(loss) before tax		22 665	(1 688)	14 951	15 629
Adjustment for working capital	5	–	1 819	1 819	1 819
Forecast cash flows		22 665	131	16 770	17 448

<b>Valuation</b>	<b>Notes</b>	<b>R'000</b>
Net present value of forecast years (FY2024 and FY2025)	6	28 693
Net present value of perpetuity (17 448 / (16,5% – 5%))	6	151 722
Less: Interest-bearing borrowings		(125 838)
Add: Cost of intangible assets not yet earning revenue	7	16 273
<b>Total amount to be offered for the shares to be purchased</b>		<b>70 850</b>

The following extract from the statement of financial position was provided at the initial consultation meeting:

<b>Metaverse Solutions (Pty) Ltd</b>			
<b>Statement of financial position as at 30 June</b>			
	<b>Note</b>	<b>2023</b>	<b>2022</b>
		<b>R'000</b>	<b>R'000</b>
<b>Assets</b>			
<b>Non-current assets</b>			
Property, plant and equipment		121 146	101 133
Goodwill		6 428	8 120
Intangible assets	7	38 837	24 533
Investment		10 250	12 245
		176 661	146 031
<b>Current assets</b>			
Inventories		4 632	4 523
Trade receivables		5 212	4 850
Cash and cash equivalents		8 216	5 009
		18 060	14 382
<b>Total assets</b>		<b>194 721</b>	<b>160 413</b>
<b>Equity and liabilities</b>			
<b>Equity</b>			
Share capital		10 000	10 000
Retained income		40 888	42 310
Total equity		50 888	52 310
<b>Non-current liabilities</b>			
Interest-bearing borrowings	8	123 018	89 147
		123 018	89 147
<b>Current liabilities</b>			
Trade and other payables		8 980	6 734
Deferred revenue		6 179	5 492
Short-term portion of interest-bearing borrowings		2 820	3 210
Income tax payable		2 836	3 520
		20 815	18 956
<b>Total equity and liabilities</b>		<b>194 721</b>	<b>160 413</b>

## Notes

- The revenue relates mainly to the 3D-Land platform as additional products are still in the development stage. The performance in FY2023 was severely impacted by loadshedding, resulting in multiple days lost without power to servers. Metaverse has since installed a solar powered back-up system which provides an uninterrupted power supply and will ensure that similar outages do not occur going forward. Therefore, revenue should return to previous levels in the short term, and is expected to grow at approximately 30% per annum for the next three years, whereafter it will reduce to a growth rate of 5% in perpetuity.
- The cost of sales are predominantly fixed costs and do not vary with the number of users or revenue. The research costs are also included in the cost of sales and are fixed costs.

- 3 Selling, general and administrative expenses include depreciation on the server infrastructure and related software, and depreciation on the solar powered back-up system. The depreciation on the server infrastructure and related software is expected to approximate the replacement cost thereof. Management does not expect that the solar powered back-up system will need to be replaced as the lifespan is more than 10 years.
- 4 Other income consists of dividends received, and interest received on cash balances. The investment represents shares in an exchange-traded fund, which consists of the top 40 shares on the JSE. The value reflected for the investment is the current market value of these shares.
- 5 The adjustment for working capital was determined using the movement between the two actual years in working capital, which included adding inventories, trade receivables and cash and cash equivalents, and then deducting trade and other payables, deferred revenue, the short-term loan, and income tax payable. The cash and cash equivalents at year end exceeded current requirements. The percentage of working capital to revenue was then used as a base to forecast requirements for the following years.
- 6 The cash flows were discounted using the current weighted average cost of capital of XS. This was calculated to be 16,5%.
- 7 The intangible assets include additional development products which have not yet been introduced to the market. A view was taken that, as the value of these is the current development cost to recreate them, this value should be added to the value of the company as an additional asset that will earn profits in future. The company has not started amortising these assets yet, as they are still in development stage.
- 8 The interest-bearing borrowings were secured predominantly at fixed interest rates.

#### **4 Consideration of financing alternatives**

The chief financial officer (CFO) of XS estimated that the amount of funding the company would require to purchase Metaverse, and to execute its strategy of integrating the company operations into the group, would be approximately R500 million. The CFO has noted the following possible sources of finance that are currently being considered.

- Utilising the existing cash balance of XS.
- A medium-term loan of R500 million from Origin Bank on the following terms:
  - The loan would bear interest at 1% above the prime rate. The prime rate was 12% per annum at the time.
  - The loan and interest are to be repaid in one bullet payment at the end of four years.
  - Interest is to be calculated and compounded annually in arrears and capitalised into the outstanding loan balance each year.
  - Transaction costs of 1% of the principal amount will be payable at the inception of the medium-term loan.
  - The bank has indicated that it is prepared to alter the amount advanced in terms of the loan to less than R500 million if necessary.
  - XS's inventory and trade receivables are to be ceded as security for the loan.
  - Covenants must be included in the agreement for interest cover and debt-to-equity ratios.
- A medium-term loan of R500 million from Genesis Bank on the following terms:
  - A fixed interest rate of 14% per annum.
  - Interest would be payable annually in arrears.
  - The loan would be repayable in five years' time.

- Transaction costs of 1% of the principal amount will be payable at the inception of the loan.
- A rights issue of one share for every ten currently held to the current shareholders of XS at a discount of 20% to the current market value of the shares, on a proportional basis. The company currently has 100 million shares in issue, and XS shares are currently trading at a value of R30,40 per share. The current cost of equity of XS is 22%. The directors believe that the shares are undervalued at a PE ratio of 16.88, as both earnings and growth are expected to continue to increase.

#### **4 New game launch**

XS is on the verge of launching a new version of one of their mobile games, an event that has been eagerly anticipated by the public for some time. The success of the launch is very important to the company, and it has incentivised the marketing team with a bonus that is dependent on the number of games the company sells at the launch.

One of the marketing staff members, Ms Jessica Mangaso, whilst arranging the social media campaign for the launch party the following day, overheard a discussion between XS's CEO and COO at the office. They said that the new game has not yet been fully tested (per internal control requirements) and therefore will be prone to technological glitches which would make the game unstable. It could even result in security weaknesses on the users' devices.

#### **Other information**

- The company has historically had a tax rate of 28%. This has been amended for years ending on or after 31 March 2023 to 27%.

**INITIAL TEST OF COMPETENCE, JANUARY 2024**  
**PROFESSIONAL PAPER 2**

**This paper consists of two questions.**  
**Answer each question in a separate answer book.**

<b>PAPER 2 QUESTION 1 – REQUIRED</b>		<b>Marks</b>	
		<b>Sub-total</b>	<b>Total</b>
(a)	<p>Criticise the free cash flow valuation of Metaverse for the proposed 80% share purchase.</p> <ul style="list-style-type: none"> <li>• Do not reperform the valuation.</li> <li>• Assume all amounts are correctly calculated.</li> </ul> <p><i>Communication skills – logical argument</i></p>	19	20
(b)	<p>Calculate and advise the management of XS on how the acquisition should be financed, considering the related funding needs of the company.</p> <ul style="list-style-type: none"> <li>• Include an analysis of the characteristics of each financing option and conclude with a recommendation.</li> <li>• For purposes of the calculation do not offset any amounts of the cash balance.</li> </ul> <p><i>Communication skills – appropriate style</i></p>	19	20
(c)	<p>Discuss any concerns you may have with respect to the conversation that Jessica overheard about the new game launch.</p> <ul style="list-style-type: none"> <li>• Ignore the SAICA Code of Professional Conduct in your discussion.</li> </ul>	10	10
<b>Total for question 1</b>			<b>50</b>