INTERMEDIATE EXAMINATION

ANSWERS TO PRACTICE TEST PAPER **TERM – JUNE 2026**

PAPER – 11 **SYLLABUS 2022**

FINANCIAL MANAGEMENT AND BUSINESS DATA ANALYTICS

Time Allowed: 3 Hours **Full Marks: 100**

The figures in the margin on the right side indicate full marks.

SECTION – A (Compulsory)

1. Choose the correct option: **[15 x 2 = 30]**

(i) Which of the following best describes systematic risk?

a. Risk unique to a single company or industry

b. Risk that affects the entire market and cannot be diversified away

c. Risk that can be completely eliminated through diversification

d. Risk caused only by internal management errors

(ii) What is the present value of ₹2,000 receivable 5 years hence if the discount rate is 8% per annum?

a. ₹1,361.16

b. ₹1,500.00

c. ₹1,250.40

d. ₹1,600.75

(iii) If annual effective rate of interest is 10.25 % per annum and nominal rate of return is 10% per annum what is the frequency of compounding

a. 1

b. 3

c. 2

d. 4

(iv) The face value of a 364-day T-bill is 100. If the purchase price is 86 then the yield on such a bill is

a. 12.45%

b. 13.36%

c. 16.32%

d. 16.56%

(v) From the enumerated list please select instrument which is not dealt in money market.

a. Equity shares

b. Treasury Bill

c. Certificate of Deposit

d. None of the above

(vi) ABC Ltd. has a Current Ratio of 1.5: 1 and Net Current Assets of 5,00,000. What are the Current Assets?

a. ₹ 5,00,000
b. ₹10,00,000
c. ₹15,00,000
d. ₹25,00,000

(vii) Debt- equity Ratio is an example of _____.

a. Short term solvency Ratio
b. Long term solvency Ratio
c. Profitability Ratio
d. None of the above

(viii) Net Income Approach to capital structure decision was proposed by _____

a. J. E. Walter
b. D. Durand
c. E. Solomon
d. M.H. Miller and D. Orr

(ix) MA Ltd. has EBIT of 36 crores. The company has 7% debentures of 72 crores. Cost of equity is 12.5%. Ignore taxes. What is the overall cost of Capital? (Ignore taxes)

a. 11.26%
b. 11.20%
c. 11.50%
d. 11.28%

(x) Capital Budgeting Decisions are based on:

a. Incremental Profit
b. Incremental Cash Flows
c. Incremental Assets
d. Incremental Capital

(xi) Which of the following is not true with reference capital budgeting?

a. Capital budgeting is related to asset replacement decisions
b. Cost of capital is equal to minimum required return
c. Existing investment in a project is not treated as sunk cost
d. Timing of cash flows is relevant

(xii) X Ltd. buys 36,000 units annually in six installments at ₹1 per unit. Ordering cost is ₹25 per order and inventory carrying cost is 20% of unit value. Economic Order Quantity (EOQ) is 3,000 units. What is the annual savings if EOQ is used instead of the existing policy?

a. ₹100
b. ₹150
c. ₹200
d. ₹250

(xiii) If the current ratio is 2.4:1 and working capital is ₹25,20,000, find the amount of current assets and current liabilities.

a. Current Assets ₹43,20,000 and Current Liabilities ₹18,00,000
b. Current Assets ₹44,00,000 and Current Liabilities ₹18,50,000
c. Current Assets ₹45,50,000 and Current Liabilities ₹19,00,000
d. Current Assets ₹46,60,000 and Current Liabilities ₹19,30,000

(xiv) A code check ensures that data entered in a field:

a. Is always numeric
b. Is entered quickly
c. Is stored in alphabetical order
d. Matches a predefined list or format

(xv) Maps may be used for displaying

a. Pincode
b. Country name
c. State abbreviation
d. All of the above

Solution:

i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.	xi.	xii.	xiii.	xiv.	xv.
b	a	c	c	a	c	b	b	a	b	c	b	a	d	d

SECTION – B

(Answer any five questions out of seven questions given. Each question carries 14 Marks)

[5 x 14 = 70]

2.

(a) Explain the concept of hedge funds and describe their key features. [7]

(b) Explain the various techniques of data mining. [7]

Solution:

(a) Hedge Funds: Hedge funds are private investment vehicles not open to the general investment public. Hedge funds face less regulation than publicly traded mutual funds, allowing them to hold substantial short positions to preserve capital during market downturns. Typically, hedge fund managers generate profit from both long as well as short positions. the private nature of hedge funds often suits both the needs of investors and managers.

Features of Hedge Fund

- Reduce risk, enhance returns and minimize the correlation with equity and bond markets.
- Flexibility in investment options.
- Variety in terms of investment returns, volatility and risk.
- consistency of returns and capital preservation.
- Managed by experienced investment professionals who are generally disciplined and diligent.
- Pension funds, endowments, insurance companies, private banks and high net worth individuals and families invest in hedge funds to minimize overall portfolio volatility and enhance returns.
- Hedge funds benefit by heavily weighting hedge fund managers' remuneration towards performance incentives.

(b) Techniques of data mining

Using various methods and approaches, data mining transforms vast quantities of data into valuable information. Here are a few of the most prevalent:

• Association rules:

An association rule is a rule-based technique for discovering associations between variables inside a given dataset. These methodologies are commonly employed for market basket analysis, enabling businesses to better comprehend the linkages between various items. Understanding client consumption patterns helps organisations to create more effective cross-selling tactics and recommendation engines.

• Neural Networks:

Primarily utilised for deep learning algorithms, neural networks replicate the interconnection of the human brain through layers of nodes to process training data. Every node has inputs, weights, a bias (or threshold), as well as an output. If the output value exceeds a predetermined threshold, the node "fires" and passes data to the subsequent network layer. Neural networks acquire this mapping function by supervised learning and gradient descent, changing based on the loss function. When the cost function is zero or close to it, we may have confidence in the model's ability to produce the correct answer.

• Decision tree:

Using classification or regression algorithms, this data mining methodology classifies or predicts likely outcomes based on a collection of decisions. As its name implies, it employs a tree-like representation to depict the potential results of these actions.

• K-nearest neighbour:

K-nearest neighbour, often known as the KNN algorithm, classifies data points depending on their closeness to and correlation with other accessible data. This technique assumes that comparable data points exist in close proximity to one another. Consequently, it attempts to measure the distance between data points, often by Euclidean distance, and then assigns some on the most common category or average.

3.

(a) Using the following data, Prepare the Balance Sheet of F Limited as at 31.3.2025:

- **Gross Profit 10% of Sales**
- **Gross Profit = ₹ 4,40,000**
- **Shareholders' equity = ₹ 40,000**
- **Credit sales to total sales = 80%**
- **Total turnover to total assets = 4 times**
- **Cost of sales to Inventory = 10 times**
- **Average collection period = 5 days, assume 365 days in a year.**
- **Long-term debt =?**
- **Current ratio = 1.5**
- **Sundry Creditors = ₹ 1,20,000.** **[7]**

(b) From the following summary of cash account of XL Pharma Ltd. for the year ended 31.03.2025, calculate Cash Flow from Operating Activities using Direct Method and prepare Cash Flow Statement.

Particulars	₹	Particulars	₹
To Balance b/d	5,00,000	By Cash Purchase	5,20,000
To Cash Sales	6,00,000	By Trade Payables	5,76,000
To Trade Receivables	6,40,000	By Rent	2,00,000
To Interest and Dividend	8,000	By Administrative Exp.	1,00,000
To Bank Loan	6,00,000	By Income Tax	1,20,000
To Sale of Investment	3,20,000	By Investment	3,60,000
To Trade Commission	1,60,000	By Repayment of Loan	4,00,000
		By Interest on Bank Loan	28,000
		By Balance c/d	5,24,000
	28,28,000		28,28,000

[7]

Solution:

(a) Working Notes:

- Calculation of Sales

  Given, Gross profit @ 25% = 2,40,000

  Sales = 2,40,000/ 25% = 9,60,000.

  Credit Sales = 80% of ₹ 9,60,000 = ₹ 7,68,000

  Cash Sales = 20% of ₹ 9,60,000 = ₹ 1,92,000.

- Calculation of Cost of Goods Sold

  Cost of Goods Sold = Sales - Gross Profit = ₹ 9,60,000 - ₹ 2,40,000 = ₹ 7,20,000.

- Calculation of Closing Inventory

  Cost of Goods Sold to Inventory = 10 times.

  Inventory = COGS / 10 = 720000/ 10 = 72,000 (assuming opening and closing inventory are same)

- Calculation of Total Assets

  Total Turnover to Total Assets = 4 times. Total

  Turnover/Total Assets = 4

  Total Assets = 9,60,000/ 4 = 2,40,000

- Calculation of Current Assets

  Current Ratio = Current Assets/Current Liabilities = 1.5: 1 (as, CL = Creditors = 120000)

  1.5 Current Liabilities = Current Assets

  or Current Assets = ₹ 1,20,000 / 1.5 = ₹ 1,80,000.

- Calculation of Debtors

  Average collection period = 5 days Debtors = (Credit Sales/365) × 5 Debtors = (7,68,000/365) × 5 = 10,520

  Calculation of Cash Current Assets= 1,80,000

  Cash + Debtors + Inventory = 90,000

  Cash = 1,80,000 – 10,520 – 72,000 = 97,480

(b)

Cash Flow Statement
For the year ended on 31.03.2025

Particulars	₹	₹
Cash Flow from Operating Activities		
Cash Sales		6,00,000
Collection from Trade Receivables		6,40,000

Trade Commission received		1,60,000
		14,00,000
Less: Cash purchase	5,20,000	
Less: Payment to Trade Payables	5,76,000	
Less: Payment of Rent	2,00,000	
Less: Payment of administration expenses	1,00,000	13,96,000
Cash Generated from Operations		4,000
Less: Payment of Income Tax		1,20,000
Cash Flow from Investing Activities		(1,16,000)
Sale of investment	3,20,000	
Interest and dividend received	8,000	
Purchase of investment	(3,60,000)	(32,000)
Cash Flow from Financing Activities		
Bank loan raised	6,00,000	
Repayment of loan	(4,00,000)	
Interest on bank loan	(28,000)	1,72,000
		24,000
Add: Opening Cash Balance		5,00,000
Closing Cash Balance		5,24,000

4.

(a) Following are Balance Sheets of NELCO Ltd. for the year ended 31st March, 2024 and 2025.

(Figures in ₹)

Liabilities	2024	2025	Assets	2024	2025
Equity Share Capital	**1,00,000**	**1,65,000**	**Fixed Assets (net)**	**1,20,000**	**1,75,000**
Preference Sh. Capital	**50,000**	**75,000**	**Stock**	**20,000**	**25,000**
Reserves	**10,000**	**15,000**	**Debtors**	**50,000**	**62,500**
Profit & Loss Account	**15,000**	**22,500**	**Bills Receivable**	**10,000**	**30,000**
Bank Overdraft	**25,000**	**25,000**	**Prepaid Expenses**	**5,000**	**6,000**
Creditors	**20,000**	**25,000**	**Cash in Bank**	**20,000**	**26,500**
Provision for Taxation	**10,000**	**12,500**	**Cash in Hand**	**5,000**	**15,000**

	2,30,000	**3,40,000**		**2,30,000**	**3,40,000**

- **Convert the given balance sheets into common-size balance sheets**
- **Analyze and interpret the significant changes between the two years** **[7]**

(b) A company's share is currently quoted in the market at ₹20. The company pays a dividend of ₹2 per share and the investors expect a growth rate of 5% per year. You are required to calculate
(i) Cost of Equity Capital of the company and
(ii) The market price per share if the anticipated growth rate dividend is 7%. **[7]**

Solution:

(a) Common Size Balance Sheet as on 31st March 2024 and 2025

Particulars	**2024**		**2025**	
	₹	**%**	**₹**	**%**
Shareholders 'Fund:				
Equity Share Capital	1,00,000	43.48%	1,65,000	48.53%
Preference Share	50,000	21.74%	75,000	22.05%
Capital Reserves	10,000	4.34%	15,000	4.41%
Profit & Loss Account	7,500	3.26%	10,000	2.95%
(1)	1,67,500	72.82%	2,65,000	77.94%
Current Liabilities:				
Bank Overdraft	25,000	10.87%	25,000	7.35%
Creditors	20,000	8.70%	25,000	7.35%
Provision for Tax	10,000	4.35%	12,500	3.68%
Proposed Dividend	7,500	3.26%	12,500	3.68%
(2)	62,500	27.18%	75,000	22.06%
Total Liabilities (1) + (2)	2,30,000	100%	2,40,000	100%
Fixed Asset (Net) (a)	1,20,000	52.17%	1,75,000	51.47%
Current Assets				
Stock	20,000	8.70%	25,000	7.35%
Debtors	50,000	21.74%	62,500	18.38%
Bills Receivables	10,000	4.34%	30,000	8.82%
Prepaid Expenses	5,000	2.17%	6,000	1.78%
Cash in Bank	20,000	8.70%	26,500	7.79%
Cash in Hand	5,000	2.18%	15,000	4.41%
(b)	1,10,000	47.83%	1,65,000	48.53%
Total Assets (a) + (b)	2,30,000	100%	3,40,000	100%

Interpretation:

- In 2024, Current Assets increased from 47.83% to 48.53%.
- Cash in Hand and Bank is increased by ₹.16,500
- Current Liabilities were decreased from 27.18% to 22.06%. The company can settle the current liabilities from current assets. The liquidity position is reasonably good.
- Fixed Assets were increased from ₹.1,20,000 to ₹.1,75,000. These were purchased from the additional share capital issued.
- The overall financial position is satisfactory.

(b) (i) The cost of Equity Capital (Ke) may be ascertained as follows:

$K_e = \frac{D_1}{D_0} + g$

Where,

D1 = Dividend per share at the end of the current year, i.e. ₹. 2

P0 = Market price per share, i.e. ₹. 20

g = Expected growth rate of dividend, i.e. 5% or 0.05

Therefore, $K_e = \frac{2}{20} + 0.05 = 0.15 = 15\%$

(ii) We know,

$K_e = \frac{D_1}{D_0} + g$

Where, D1 = ₹2, $K_e = 0.15$, g = 0.07

$K_e = 0.15 = \frac{2}{PO} + 0.07$

$P0 = \frac{2}{0.15-0.07}$ = ₹.25 per share

5.

(a) A firm whose cost of capital is 10% is considering two mutually exclusive projects, A and B, the details of which are:

	Year	Project A (₹)	Project B (₹)
Initial Cost	**0**	**2,00,000**	**2,00,000**
Cash Inflows	**1**	**20,000**	**1,00,000**
	2	**40,000**	**80,000**

	3	60,000	40,000
	4	90,000	20,000
	5	1,20,000	20,000

Evaluate the two projects by computing their Net Present Value and Profitability Index at 10%. [7]

(b) A company is considering a new project for which the investment data are as follows:

Capital outlay ₹ 8,00,000

Depreciation 20% p.a.

Forecasted annual income before charging depreciation, but after all other charges are as follows:

Year	₹
1	4,00,000
2	4,00,000
3	1,60,000
4	1,60,000
5	80,000

On the basis of the available data, set out calculations, illustrating and comparing the following methods of evaluating the return:

I. Payback method.

II. Rate of return on original investment. [7]

Solution:

(a) Calculation of NPV

Year	CF (₹)		PVIF @10%	Total PV (₹)	
	A	B		A	B
1	20,000	1,00,000	0.909	18,180	90900
2	40,000	80,000	0.826	33,040	66080
3	60,000	40,000	0.751	45,060	30040
4	90,000	20,000	0.683	61,470	13660
5	1,20,000	20,000	0.621	74,520	12420
Total PV				2,32,270	2,13,100
Less cash outflow				2,00,000	2,00,000
NPV				32,270	13,100

PI = (PV of Inflows/PV of Outflows)	1.161	1.065

Thus, under both NPV and PI method, project A is accepted.

(b) Since there is no tax, the annual income before depreciation and after other charges is equivalent to Cash flows (CF).

- Capital outlay of ₹8,00,000 is recovered in the first two years, (₹.4,00,000 (year 1) + ₹ 4,00,000 (year 2), therefore, the pay-back period is two years.
- Rate of return on original investment:

Year	Income (₹)	Depreciation (₹)	Net Income (₹)
1	4,00,000	1,60,000	2,40,000
2	4,00,000	1,60,000	2,40,000
3	1,60,000	1,60,000	0
4	1,60,000	1,60,000	0
5	80,000	1,60,000	-80,000
			4,00,000

Average Income = ₹ 4,00,000/5 = ₹ 80,000

Rate of Return = (Average income/ Original investment) × 100

= (80,000/8,00,000) × 100

= 10%

6.

(a) Prepare a working capital forecast from the following information:

Production during the previous year was 20,00,000 units. The same level of activity is intended to be maintained during the current year. The expected ratios of cost to selling price are:

Raw materials	**40%**
Direct Wages	**20%**
Overheads	**20%**

The raw materials ordinarily remain in stores for 3 months before production. Every unit of production remains in the process for 2 months and is assumed to be consisting of 100% raw material, wages and overheads. Finished goods remain in the warehouse for 3 months. Credit allowed by creditors is 4 months from the date of the delivery of raw material and credit given to debtors is 3 months from the date of dispatch.

The estimated balance of cash to be held ₹ 4,00,000

Lag in payment of wages ½ month Lag

in payment of expenses ½ month

Selling price is ₹ 8 per unit. You are required to make a provision of 10% for contingency (except cash). Relevant assumptions may be made.
[7]

(b) X Ltd. purchases 1,00,000 units of material P every month to maintain a steady supply for production. The ordering cost is ₹200 per order and the carrying cost is 10 paise per unit per month.
Apply the Economic Order Quantity (EOQ) formula to determine the optimal order quantity. Further, analyze whether X Ltd. should accept a quantity discount of 1 paise per unit if the company places orders in lots of 50,000 units. [7]

Solution:

(a) Total Sales = 20,00,000 × 8 = ₹ 1,60,00,000

Statement of Working Capital Requirement

Particulars	₹	₹
A. Current Asset:		
Debtors (1,60,00,000 × 80% × 3/12)	32,00,000	
Finished Goods (1,60,00,000 × 80% × 3/12)	32,00,000	
Work-in-progress (1,60,00,000 × 80% × 2/12)	21,33,333	
Raw Materials (1,60,00,000 × 40% × 3/12)	16,00,000	
Total current assets		1,01,33,333
B. Current Liabilities:		
Creditors (1,60,00,000 × 40% × 4/12)	21,33,333	
Wages (1,60,00,000 × 20% × 1/24)	1,33,333	
Overheads (1,60,00,000 × 20% × 1/2 4)	1,33,334	24,00,000
Excess of CA over CL		77,33,333
+ 10% contingency		7,73,333
		85,06,666
Cash		4,00,000
Working Capital Requirement		89,06,666

(b) Economic Order Quantity (EOQ) = $\sqrt{\frac{2AS}{I}}$

A = Annual consumption in units = 1,00,000 × 12 = 12,00,000 units

S = Cost of placing an order = ₹200

I = Inventory carrying cost = ₹0.10 × 12 = ₹1.20

$$EOQ = \sqrt{\frac{2 \times 1200000 \times 200}{1.20}}$$

= 20,000 units

Calculation of comparative cost

	EOQ Offer	Discount Offer
Order Size (units)	20,000	50,000
No. of Orders = 12,00,000/Order size	60	24
Cost per order (₹)	200	200
Total ordering cost (₹)	12,000	4,800
Average inventory = Order size/2 (units)	10,000	25,000
Carrying cost per unit per annum (₹)	1.20	1.20
Total carrying cost (₹)	12,000	30,000
Total inventory cost (₹)	24,000	34,800
(-) Discount (1200000 × 0.01) (₹)	Nil	12,000
Net cost (₹)	24,000	22,800

So, the firm can save in annual cost of maintaining inventory to the extent of (24,000 – 22,800) = ₹1,200 by accepting the discount offer.

7.

(a) The following figures are collected from the annual report of PQR Ltd.:

Net profit	**₹ 60 Lakhs**
Outstanding 12% Preference shares	**₹ 200 Lakhs**
Number of Equity shares	**6 Lakhs**
Return on Investment	**20%**
Cost of capital	**16%**

Examine what should be the approximate dividend payout ratio so as to keep the share price at ₹42 by using Walter's model? [7]

(b) The ABC Ltd. has the following balance sheet and income statement information:

Balance sheet as on March 31, 2025			
Liabilities	**Amount (₹)**	**Assets**	**Amount (₹)**

Equity capital (₹ 10 per share)	**8,00,000**		
10% Debt	**6,00,000**	**Net fixed assets**	**10,00,000**
Retained earnings	**3,50,000**	**Current assets**	**9,00,000**
Current liabilities	**1,50,000**		
Total	**19,00,000**	**Total**	**19,00,000**

Income statement for the year ending March 2025	
Particulars	**Amount (₹)**
Sales	**3,40,000**
Operating Expenses (including ₹ 60,000 depreciation)	**1,20,000**
EBIT	**2,20,000**
Less: Interest	**60,000**
Earnings Before Tax (EBT)	**1,60,000**
Less: Taxes	**56,000**
Net Earnings after Tax (EAT)	**1,04,000**

- **Calculate the degree of operating, financial and combined leverages at the current sales level, if all operating expenses, other than depreciation, are variable costs.**
- **If total assets remain at the same level, but sales (i) increase by 20% and (ii) decrease by 20 Examine what will be the earnings per share in the new situation?** **[7]**

Solution:

(a) As per Walter's model, value per share is given by –

$$P = \frac{D+\frac{r}{k}\times(E-D)}{k}$$

where P = Current Market price per share,

D = Dividend per share,

E = Earnings per share,

r = rate of return on investment,

k = cost of capital.

Here, r = 20% i.e. 0.20, k = 16% i.e. 0.16

$$E = \frac{60-(200\times 12\%)}{6} = ₹6$$

Let D/P ratio is y

So, D = ₹ 6xy

Conditionally, $P = \frac{D+\frac{r}{k}\times(E-D)}{k}$

or, $42 = \frac{6y+\frac{0.20}{0.16}\times(6-6y)}{0.16}$

or, $6.72 = 6y + 7.50 - 7.50y$

or, $1.5y = 0.78$

or, $y = 0.52$

So, the required dividend payout ratio is 52%.

(b) $DOL = \frac{3,40,000-60,000}{2,20,000} = 1.27$

$DFL = \frac{2,20,000}{1,60,000} = 1.37$

DCL= DOL×DFL = 1.27×1.37 = 1.75

Particulars	Amount (₹)	Amount (₹)
Sales level (Volume) Less: Variable expenses Less: Fixed cost	4,08,000 72,000 60,000	2,72,000 48,000 60,000
Earnings Before Interest and Taxes Less: Interest	2,76,000 60,000	1,64,000 60,000
Earnings before taxes Less: Taxes	2,16,000 75,600	1,04,000 36,400
Earnings after taxes (EAT) Number of equity shares (N)	1,40,400 80,000	67,600 80,000
EPS	1.75	0.84

Working Notes

(i) Variable costs = ₹ 60,000 (total cost – depreciation).

(ii) Variable costs = (a) at sales level, ₹ 4,08,000 = ₹ 72,000, (b) at the sales level, ₹ 2,72,000 = ₹ 48,000

8.

(a) Explain the six core steps involved in converting data into user-friendly information. [7]

(b) Explain the important guidelines for doing data visualisation in the right way. [7]

Solution:

(a) To make the data turn into user friendly information, it should go through six core steps:

- Collection of data: The collection of data may be done with standardized systems in place. Appropriate software and hardware may be used for this purpose. Appointment of trained staff also plays an important role in collecting accurate and relevant data.
- Organising the data: The raw data needs to be organized in an appropriate manner to generate relevant information. The data may be grouped, arranged in a manner that create useful information for the target user groups.
- Data processing: At this step, data needs to be cleaned to remove the unnecessary elements. If any data point is missing or not available, that also need to be addressed. The options available for presentation format for the data also need to be decided.
- Integration of data: Data integration is the process of combining data from various sources into a single, unified form. This step include creation of data network sources, a master server and users accessing the data from master server. Data integration eventually enables the analytics tools to produce effective, actionable business intelligence.
- Data reporting: Data reporting stage involves translating the data into a consumable format to make it accessible by the users. For example, for a business firm, they should be able to provide summarized financial information e.g. revenue, net profit etc. The objective is, a user, who wants to understand the financial position of the company should get the relevant and accurate information.
- Data utilization: At this ultimate step, data is being utilized to back corporate activities and enhance operational efficiencies and productivity for the growth of business. This makes the corporate decision making really 'data driven'.

(b) All data visualisation isn't created equally engaging. When properly executed, it simplifies difficult topics. However, if data visualisations are executed improperly, they might mislead the audience or misrepresent the data.

Finance professionals who are investigating how data visualisation might help their analytics efforts and communication should keep the following in mind:

- Know the objective: Before the development of great images, one must first grasp the objectives. HBR's Berinato suggests, first establishment of the information if it's conceptual or data-driven (i.e. does it rely on qualitative or quantitative data) is required. Then specify if the objective is exploratory or declarative. For instance, if the objective is to display the income from the prior quarter, the goal is declarative. If, on the other hand, one is curious as to whether the income increase correlates with the social media spending, the objective is exploratory. According to Berinato, determining the answers would assist in determining the tools and formats required.
- **Always keep the audience in mind:** Who views the data visualisations will determine the degree of detail required. For instance, finance data presentations for the C-suite require high-level, highly relevant information to aid in strategic decision-making. However, if one is delivering a presentation to 'line of business' executives, delving into the deeper details might offer them with knowledge that influences their daily operations.
- **Invest in the best technology:** There are a multitude of technological tools that make it simple to produce engaging visualisations in the current digital age. The firm should first implement an ERP that removes data silos and develops a centralised information repository. Then, look for tools that allows to instantly display data by dragging and dropping assets, charts, and graphs; offer search options and

guided navigation to assist in answering queries; and enable any member of the financial team to generate graphics.

- **Improve the team's ability to visualise data:** Most of the agile finance directors rank their team's data visualisation abilities as good, compared to only twenty four percent of their counterparts, according to an AICPA survey. While everyone on the finance team can understand the fundamentals of data visualisation, training and a shift in hiring priorities may advance the team's data visualisation skills. Find ways to incorporate user training on data visualisation tools, so that the staff is aware of the options that the technology affords. Additionally, when making new recruits, look out individuals with proficiency in data analytics and extensive data visualisation experience.

  The amount of data analysed by financial teams has grown dramatically. Data visualisations may help the team convey its strategic findings more effectively throughout the enterprise.