Asset – light – B2B startups- - Financial Modelling

Caselet 1: Core Man-Hour Revenue Model

"DataSolve Analytics: Understanding Revenue from Billable Capacity"

Background

DataSolve Analytics is a Hyderabad-based analytics and consulting startup providing data engineering, dashboarding, and predictive analytics services to mid-sized firms in banking, healthcare, and retail. The firm follows an **asset-light professional services model**, where revenue is primarily driven by billable consulting hours rather than product sales.

Current Operations

DataSolve employs **40 consultants** across junior and senior levels. Each consultant works **48 weeks per year**, with **a 40-hour workweek**, resulting in **1,920 available hours per consultant annually**. Due to internal meetings, training, and business development activities, not all available hours are billable.

At present, the firm operates at an average **utilization rate of 65%**. Clients are billed at a **blended rate of ₹3,500 per billable hour**, reflecting a mix of junior and senior consultants.

Management Concern

Although client demand appears strong, management is unsure whether revenue growth is constrained by **pricing** or by **under-utilization of consultant capacity**. Before investing in hiring or marketing, the founders want a clear understanding of how revenue is generated from existing resources.

Student Tasks

1. Estimate total annual billable hours
2. Forecast annual revenue based on current utilization
3. Analyze revenue sensitivity to:
    - Utilization rate
    - Billing rate

Key Learning Objective

To understand how **capacity × utilization × billing rate** directly determines revenue in asset-light B2B services firms.

Caselet 2: Utilization and Margin Sensitivity

“How Much Does Utilization Really Matter?”

Background

While DataSolve Analytics has shown consistent revenue growth, its **EBITDA margins fluctuate sharply** across quarters. Management suspects that small changes in utilization significantly impact profitability because consultant salaries are largely fixed in the short run.

Cost Structure

- Average annual cost per consultant: **₹18 lakh**
- Total consultants: **40**
- Annual consultant cost: **₹7.2 crore**
- Fixed overheads (rent, admin, software tools): **₹3 crore per year**

Most costs remain fixed regardless of how many hours are billed in a given month.

Strategic Proposal

The operations team proposes investing in project management tools and internal process improvements that could raise utilization from **65% to 75%** over the next year. The investment itself is small, but management wants to assess whether higher utilization meaningfully improves margins.

Student Tasks

1. Compute EBITDA at utilization levels of **60%, 65%, 70%, and 75%**
2. Identify the **utilization break-even point**
3. Comment on operating leverage and margin sensitivity

Key Learning Objective

To demonstrate how **utilization acts as the primary profit lever** in professional services startups.

Caselet 3: Capacity Expansion and Scalability

"Scaling DataSolve: Hire More Consultants or Sweat Existing Capacity?"

Background

DataSolve plans to grow revenues by **30% in the coming year**. Management is debating two alternative growth strategies:

- **Strategy A:** Increase utilization from 65% to 75% using better planning
- **Strategy B:** Hire **10 additional consultants**, maintaining utilization at 65%

Each strategy involves different execution risks and cost implications.

Hiring Economics

- Cost per new consultant: **₹20 lakh per year**
- New hires take time to ramp up and are expected to operate at **50% utilization** in their first year
- Billing rates remain unchanged

Decision Challenge

While hiring increases headline capacity, under-utilized new hires can dilute margins. Improving utilization, on the other hand, requires stronger internal discipline but no major fixed cost addition.

Student Tasks

1. Forecast revenue under both strategies
2. Compare EBITDA outcomes
3. Recommend a preferred growth strategy with justification

Key Learning Objective

To analyze **growth through efficiency vs growth through scale**, using incremental financial modeling.

Caselet 4: Client Concentration and Earnings Normalization

"Is DataSolve Too Dependent on One Client?"

Background

DataSolve's largest BFSI client accounts for **38% of total revenue**. This client pays premium rates and requires minimal selling effort, resulting in unusually high margins.

An acquiring firm has expressed concern that reported EBITDA may not be sustainable if this client reduces engagement.

Financial Snapshot

- Total revenue: **₹28 crore**
- Revenue from largest client: **₹10.6 crore**
- Overall EBITDA margin: **22%**
- EBITDA margin on largest client: **30%**
- Expected normalized margin: **18%**

Acquirer's Question

What would DataSolve's earnings look like **without over-reliance on one high-margin client**?

Student Tasks

1. Compute normalized EBITDA
2. Compare reported vs normalized margins
3. Discuss implications for valuation and deal risk

Key Learning Objective

To introduce **earnings quality, normalization, and client concentration risk** in M&A contexts.

Caselet 5: EBITDA-Based Valuation and Acquisition Readiness

"Valuing DataSolve Analytics for Acquisition"

Background

A global IT services firm is evaluating the acquisition of DataSolve to strengthen its analytics capabilities. Comparable transactions in India suggest **EBITDA multiples ranging from 6× to 9×, depending on visibility of growth** and client diversification.

Earnings Profile

- Reported EBITDA: **₹6.2 crore**
- Normalized EBITDA: **₹5.0 crore**
- Growth outlook: Moderate but stable

Valuation Question

The acquirer wants to understand how valuation changes depending on whether reported or normalized earnings are used.

Student Tasks

1. Estimate valuation ranges under:
    - Reported EBITDA
    - Normalized EBITDA
2. Compare downside and upside risks
3. Comment on acquisition readiness

Key Learning Objective

To connect **operating performance → earnings quality → valuation outcomes**.