



Mu Sigma

Operational Metrics and Financial Ratios

Discussion Document

Do The Math

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General concepts and guiding principles

- ▶ Ratios and symphony
 - No ratio means anything on its own. Ratio is a critical component in understanding R(el)atio(n)s
 - Comparison with prior period, industry peers etc
 - Co-relation with other ratios and elements of Financials not generally used in ratios
 - Context is important
- ▶ Importance of consistency in formulae
 - Consistency in formulae across comparable companies and periods
- ▶ Marrying investors' and management's interests
 - Investors need ratios that enable them to compare performances of different investees for benchmarking
 - Management will want tailor-made ratios to monitor the pulse of operations and to measure alignment with strategies
 - Formulae can vary in each stakeholder's eyes.
- ▶ Frequency and applicability of measurements
 - Some ratios are best used only annually. Respect seasonality.
 - Not all ratios need to be analysed irrespective of availability of all data points
 - Ratios are expressed as percentages, numbers or as one in respect of the other (:)

Relationship across components of the financial statements

- ▶ Pure P&L ratios
 - Operating Margin
 - Tax on EBT ratio

- ▶ Pure Balance Sheet ratios
 - Debt Equity Ratio
 - Current Ratio
 - Liquid Ratio

- ▶ Hybrid ratios
 - Debt Service Coverage Ratio
 - Day Sales Outstanding
 - Fixed Asset Turnover ratio
 - Earnings Per Share

- ▶ Ratios that use data not on face of the financials
 - P/E Ratio (Price/Earnings per share)
 - Utilisation

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Revenue Productivity(RP)/Charge-out rate

- ▶ Formula:
 - Total Revenue/Total Billed Person Months
 - Can be further analysed with account/vertical/geography and delivery variables
- ▶ Example:

Particulars	Company A	Company B
Offshore RP per month	\$ 2,000	\$ 1,500
Onsite RP per month	\$ 4,000	\$ 3,000
Total Billed Person Months - Offshore	100	100
Total Billed Person Months - Onsite	20	20
Total Revenue	\$ 280,000	\$ 210,000

- ▶ Buffers and representation of discount are important factors to consider in revenue productivity (Illustration 1)

Utilisation

- ▶ Utilisation = Billed Person Months/Billable Person Months (or) Billed Person Months/Total Person Months (or) Billable Person Months/Total Person months
- ▶ Billability Vs Utilisation
- ▶ Inclusion of leadership and general management in the denominator
- ▶ How to measure utilisation in an eco-system where both products and services are monetized

Onsite Mix and Pyramids

- ▶ Onsite mix is predominantly used in companies thriving on global delivery model where there is scope for cost arbitrage in multiple geographies
- ▶ $\text{Onsite mix} = \text{Onsite effort} / \text{Total effort}$
- ▶ Revenue is directly proportionate to onsite mix and profitability is inversely proportionate to the mix
- ▶ Organisation pyramid represents the span of control and is critical to delivery organisation more than with the support organisation
- ▶ An ideal pyramid will take into account both the operational requirements as well as dependency of profile with respect to the rates
- ▶ The triumvirate of revenue productivity, utilisation and onsite mix are the most widely used levers to control topline and margins in a GDM environment (Illustration 2)

Client retention and concentration

- ▶ Both are important measurements with respect to client acquisition
- ▶ Client Retention % indicates what percentage of revenues emanate from accounts won in previous periods
- ▶ Client Concentration could indicate contribution to top line by the top 5 or 10 clients or define how many clients make up 25% of revenue
- ▶ Client contribution could also be presented on geographies and verticals
- ▶ With respect to both client retention and client concentration, the key contributor is important

Attrition

- ▶ On its own, attrition percentage does not indicate much
- ▶ Attrition has to be further analysed as involuntary and voluntary attrition percentages
- ▶ Seasonality and information of 'where-to' says a lot more about the impact of attrition

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Financial and Working Capital ratios

- ▶ Effective tax rate
 - Tax Provision for a period/Profit before tax
 - Compare with companies in the same line of business and operating out of a similar tax regime
 - Also helps in deriving a tax strategy that can optimise use of tax sops provided by various regimes and transfer pricing policies
 - Interesting to read this number along with contingent liabilities where the rates vary significantly across reporting periods
- ▶ Day Sales Outstanding
 - Debtors/Last Twelve months revenue * 365
 - Has to be compared with average payment period and current ratio
 - The components that enable making this ratio look good are unbilled and deferred revenues
- ▶ Cash over expenses
 - Cash in Hand/Monthly cash expense
 - This is an indicator of both the profits retained in the system as well as the quantum of revenue holiday it can afford

Other useful ratios

- ▶ Return on Capital Employed (EBIT/Average Capital Employed)
- ▶ Debt equity ratio
- ▶ Debt Service Coverage Ratio
- ▶ P/E Ratio
- ▶ Current Ratio
- ▶ Liquid ratio

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Illustration 1: Revenue Productivity

- ▶ The importance of effective revenue productivity – role of buffers

Delivery Location	Company 1	Company 2
Offshore RP per month	\$ 2,000	\$ 1,500
Onsite RP per month	\$ 4,000	\$ 3,000
Total Billed Person Months - Offshore	100	100
Total Billed Person Months - Onsite	20	20
Total Revenue	\$ 280,000	\$ 210,000
Total buffer person Months - Offshore	20	0
Total Buffer Person Months - Onsite	5	2
Effective Revenue Productivity – Offshore	\$ 1,667	\$ 1,500
Effective Revenue Productivity – Onsite	\$3,200	\$ 2,727

Illustration 2 – Key Operating Levers

Particulars	Base Scenario	Simulator	Key Determinant
Total billable manpower	100	100	
Onsite Mix%	20%	20%	Model viability
Total Offshore Resources	80	80	
Total Onsite resources	20	20	
Utilisation %	80%	80%	Operational efficiency
Total Offshore Resources - Billed	64	64	
Total Onsite resources-Billed	16	16	
Offshore revenue Productivity	3,000	3,000	Market Forces
Onsite Revenue Productivity	4,000	4,000	Market Forces
Offshore Cost per resource	1,000	1,000	Market Forces
Onsite cost per resource	3,000	3,000	Market Forces
Revenue	256,000	256,000	
Salary Cost	140,000	140,000	
Margin	116,000	116,000	
Margin %	45	45	



Thank You!