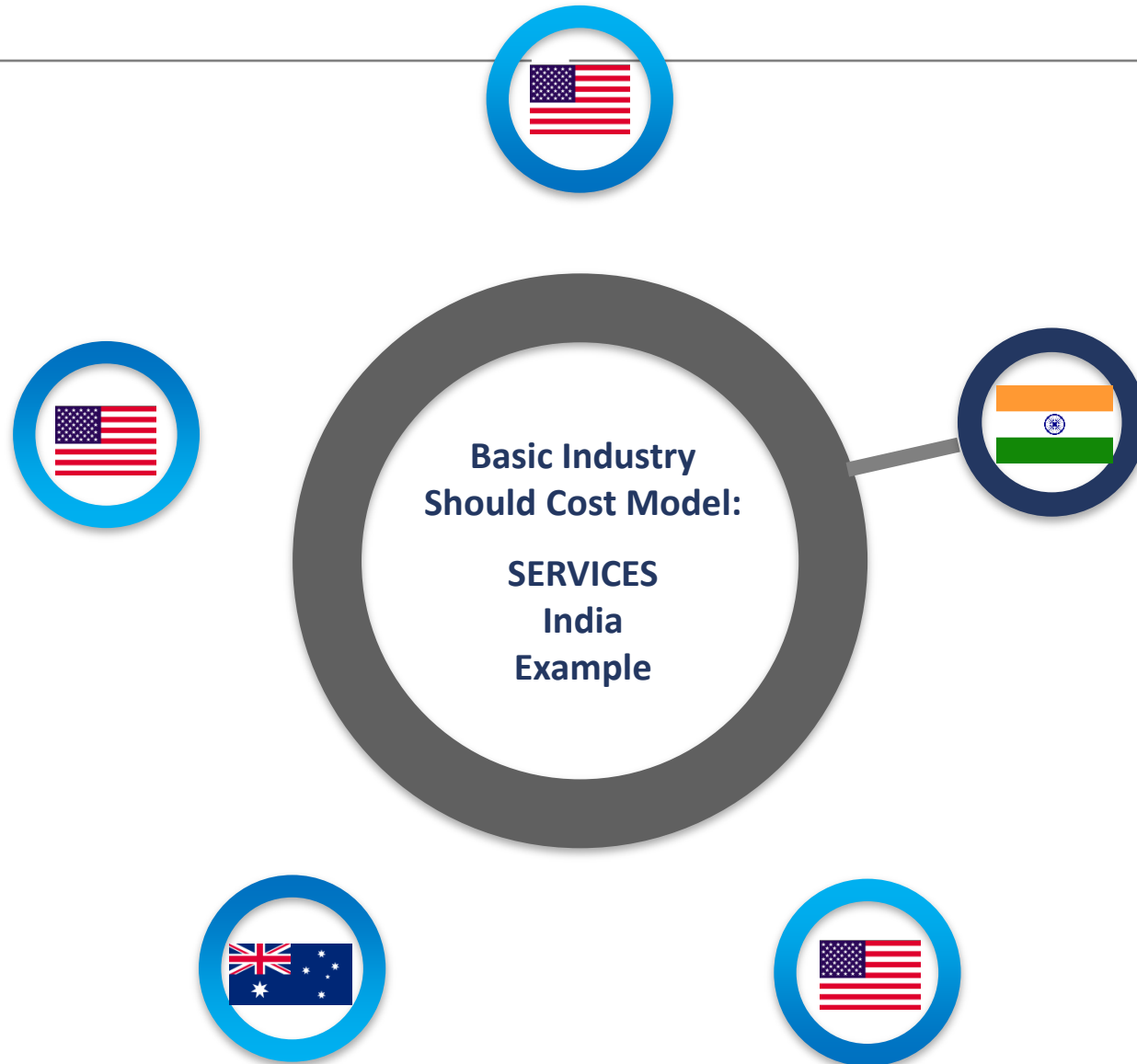


COST MODEL EXAMPLES



Scenario: IT Services Example

- You are currently in final negotiations with Intelli Solutions, an IT services company based in Bangalore, India, providing support services to your IT department for a major server upgrade project
- Intelli has prepared a Statement of Work (SOW) that requires a team of **1 Project Manager, 2 Sr. Computer Programmers and 5 Server Administrators** to work for **40 weeks full time** to execute this project
- Based on the above SOW estimate they have quoted a price of **Rs. 30,000,000** for the project
- The head of your IT department has requested you to verify if the quote is fair and reasonable before signing the final contract



Build an Industry Cost Profile

Identify data source for financial information

1

Obtain financial information for the industry

2

Use financial information to calculate ratios

3

Build an Industry Cost Profile

1. Identify data source for financial information

Direct Material	
Direct Labor	
Manufacturing Overhead	
Cost of Goods Sold	
GSA & Other Expenses	
Profit Before Tax	
PRICE	100%

- ❑ Financial information consolidators
 - ❑ Risk Management Association (RMA), Dun & Bradstreet (D&B), Hoovers, Orbis (Bureau Van Dijk), Yahoo Finance, Reuters, et al
- ❑ Company financial statements
 - ❑ Annual Reports, 10-K's, 20-F's, financials on website
- ❑ Government sites
 - ❑ Insee France
 - ❑ Annual Business Inquiry - (UK)
 - ❑ Indian Annual Survey of Industries

Note: To access a variety of data sources go to [Anklesaria Learning Academy](#)

Build an Industry Cost Profile

2. Obtain financial information for the industry

Infosys - Statement of Profit and Loss (Income Statement)

Consolidated Statement of Profit and Loss

in ₹ crore, except equity share and per equity share data

Particulars	Note no.	Year ended March 31,	
		2021	2020
Revenue from operations	2.16	1,00,472	90,791
Other income, net	2.17	2,201	2,803
Total income		1,02,673	93,594
Expenses			
Employee benefit expenses	2.18	55,541	50,887
Cost of technical sub-contractors		7,084	6,714
Travel expenses		554	2,710
Cost of software packages and others	2.18	4,223	2,703
Communication expenses		634	528
Consultancy and professional charges		1,261	1,326
Depreciation and amortization expenses	2.2, 2.3.2 & 2.19	3,267	2,893
Finance cost		195	170
Other expenses	2.18	3,286	3,656
Total expenses		76,045	71,587
Profit before tax		26,628	22,007
Tax expense			
Current tax	2.15	6,672	5,775
Deferred tax	2.15	533	(407)
Profit for the period		19,423	16,639

Build an Industry Cost Profile

2. Obtain financial information for the industry

Infosys – Notes to Financial Statements

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the exchange rate in effect at the Balance Sheet date.

Government grant

The Group recognizes government grants only when there is reasonable assurance that the conditions attached to them shall be complied with, and the grants will be received. Government grants related to assets are treated as deferred income and are recognized in net profit in the Consolidated Statement of Profit and Loss on a systematic and rational basis over the useful life of the asset. Government grants related to revenue are recognized on a systematic basis in net profit in the Consolidated Statement of Profit and Loss over the periods necessary to match them with the related costs which they are intended to compensate.

Other income for the years ended March 31, 2021 and March 31, 2020 is as follows:

Particulars	in ₹ crore	
	Year ended March 31,	
	2021	2020
Interest income on financial assets carried at amortized cost:		
Tax-free bonds and government bonds	143	143
Deposit with bank and others	1,052	1,146
Interest income on financial assets carried at fair value through other comprehensive income		
Non-convertible debentures and certificates of deposit, commercial paper and government securities	409	322
Income on investments carried at fair value through profit or loss		
Dividend income on liquid mutual funds	11	2

2.18 Expenses

Particulars	in ₹ crore	
	Year ended March 31,	
	2021	2020
Employee benefit expenses		
Salaries including bonus	53,616	49,252
Contribution to provident and other funds	1,337	1,107
Share-based payments to employees (Refer to Note 2.11)	333	249
Staff welfare	255	279
	55,541	50,887
Cost of software packages and others		
For own use	1,221	1,035
Third-party items bought for service delivery to clients	3,002	1,668
	4,223	2,703
Other expenses		
Repairs and maintenance	1,300	1,480
Power and fuel	143	229
Brand and marketing	355	528
Short-term leases (Refer to Note 2.19)	82	89
Rates and taxes	256	193
Consumables	111	100
Insurance	134	90
Provision for post-sales client support and others	39	–
Commission to non-whole-time directors	6	8
Impairment loss recognized / (reversed) under expected credit loss model	190	172
Contributions towards Corporate Social Responsibility ⁽¹⁾	439	385
Others	231	382
	3,286	3,656

⁽¹⁾ Includes ₹37 crore which the Company intends to spend in the future relating to and in addition to the amounts spent in the prior years

Build an Industry Cost Profile

3. Use Financial and Service Information to Calculate Ratios

Financial Ratios for Top 3 IT companies in India

	In ₹ crores	In ₹ crores	In ₹ millions	% of Total Income/Revenue			
	Infosys	TCS	Wipro	Infosys	TCS	Wipro	Average
Total Income/Revenue	102,673	167,311	643,256	100.0%	100.0%	100.0%	100.0%
Employee Benefit Expenses	55,541	91,814	332,371	54.1%	54.9%	51.7%	53.5%
<i>Salaries Including Bonus</i>	53,616	83,045	318,043	52.2%	49.6%	49.4%	50.4%
Direct Labour (80% of salaries including bonus)	42,893	66,436	254,434	41.8%	39.7%	39.6%	40.3%
Service Overhead	15,047	26,657	130,722	14.7%	15.9%	20.3%	17.0%
Cost of Sales	57,940	93,093	385,156	56.4%	55.6%	59.9%	57.3%
GSA & Other Expenses:	22,726	31,970	135,581	22.1%	19.1%	21.1%	20.8%
<i>Indirect Labour (20% of employee benefit exp)</i>	11,108	18,363	66,474	10.8%	11.0%	10.3%	10.7%
<i>Communication expenses</i>	634	1,896	6,069	0.6%	1.1%	0.9%	0.9%
<i>Depreciation and Amortization</i>	3,267	4,065	27,634	3.2%	2.4%	4.3%	3.3%
<i>Other Expenses (including finance cost)</i>	3,481	6,670	15,317	3.4%	4.0%	2.4%	3.3%
<i>Marketing and Legal Expenses</i>	0	0	6,572	0.0%	0.0%	1.0%	0.3%
Profit Before Taxes	22,007	42,248	122,519	21.4%	25.3%	19.0%	21.9%

Note - Direct Labor is assumed to be **80% of Salaries including Bonus** - Based on benchmarking data

Build an Industry Cost Profile

Industry Cost Profile for IT Services in India (figures in %):

Element	%
Direct Labor	40.3%
Service Overhead	17.0%
Cost of Sales	57.3%
GSA & Other Expenses	20.8%
Profit Before Tax	21.9%
PRICE	100%

Monetize one cost element (e.g. Direct Labor)

Break down the Statement of Work and determine the labour resource requirements for the contract	# people, job title & description
Calculate Direct Labor cost for contract term	Total team = Rs / year

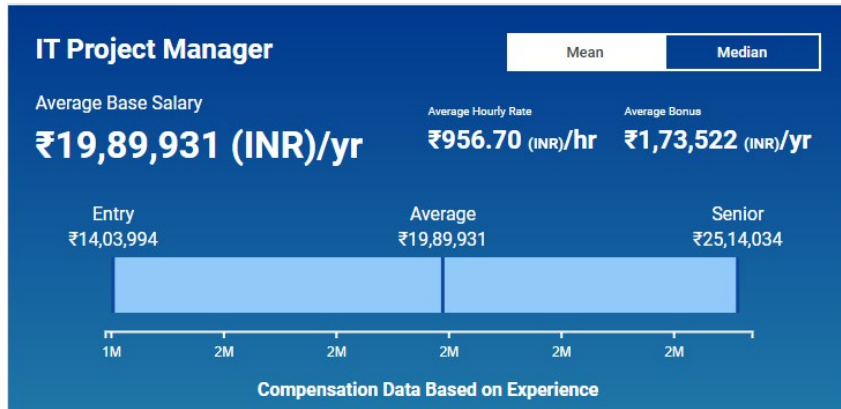


Break down the Statement of Work and determine the labor resource requirements for the contract	<ul style="list-style-type: none"> 1 Project Manager 2 Sr. Computer Programmers 5 Server Administrators
Calculate Direct Labor cost for contract term	<ul style="list-style-type: none"> 1 Project Manager @ Rs / yr 2 Sr. Computer Programmers @ Rs / yr 5 Server Administrators @ Rs / yr Total team = Rs / year

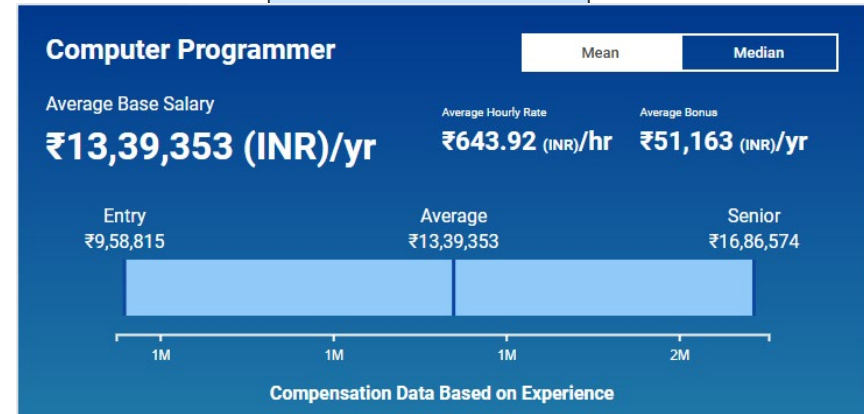
Monetize one cost element (e.g. Direct Labor)

SALARY DATA (from www.salaryexpert.com)

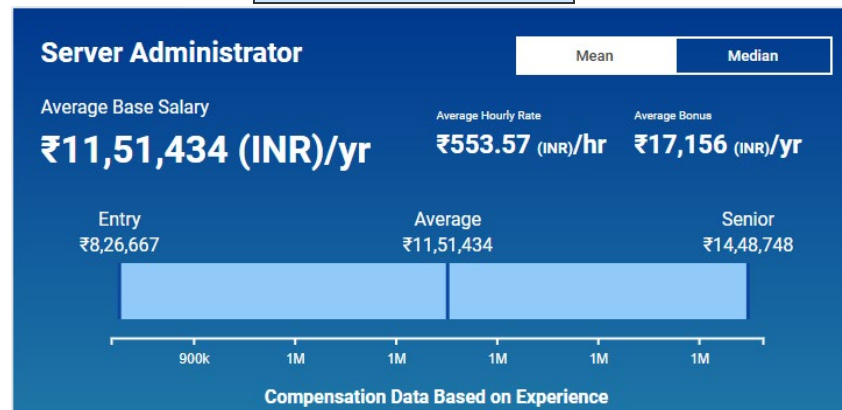
IT Project Manager



Computer Programmer



Server Administrator



Monetize one cost element (e.g. Median Salary for Direct Labor)

Break down the Statement of Work and determine the labor resource requirements for the contract	<ul style="list-style-type: none"> 1 Project Manager 2 Sr. Computer Programmers 5 Server Administrators
Using data from www.salaryexpert.com , calculate Direct Labor cost for contract term (Base Salary + Bonus)	<ul style="list-style-type: none"> 1 Project Manager @ Rs 1,989,931 2 Sr. Computer Programmers @ Rs 1,339,353 / person 5 Server Administrators @ Rs 1,151,434 / person Total = Rs 10,425,807 per year for the Team
Estimate Billed Hours per year	=? hours per year
Calculate Direct Labor Rs per hour (Direct Labor Cost / Billed time)	<ul style="list-style-type: none"> = Rs 10,425,807 per year / ? hours per year = Rs? per hour for team
Calculate Direct Labor Cost for project time (Direct Labor Rs per hour * project time)	<ul style="list-style-type: none"> = Rs / hr team * term of project = Rs? Direct Labor for project

Monetize one cost element (e.g. Direct Labor)

Example: Calculation of Billed hours / Utilization Rate:

	Days in a year	365
-	Weekends	105
=	Number of billable days	260
-	National holidays	12
-	Vacation days	14
-	Sick & personal days	6
-	Training days	8
-	Out of project days	12
=	Number of days billed	208
	Number of billable hours*	2,080
	Number of hours billed*	1,664
	Utilization Rate	80%

* Calculated assuming 8-hour day

Monetize one cost element (e.g. Direct Labor)

Break down the Statement of Work and determine the labor resource requirements for the contract	1 Project Manager 2 Sr. Computer Programmers 5 Server Administrators
Using data from www.salaryexpert.com , calculate Direct Labor cost for contract term (Base Salary + Bonus)	1 Project Manager @ Rs 1,989,931 2 Sr. Computer Programmers @ Rs 1,339,353 / person 5 Server Administrators @ Rs 1,151,434 / person Total = Rs 10,425,807 per year for the Team
Estimate Billed Hours per year	= 1,664 hours (80% utilization)
Calculate Direct Labor Rs per hour (Direct Labor Cost / Billed time)	= Rs 10,425,807 / 1,664 hours = Rs 6,266 per hour for team
Calculate Direct Labor Cost for project time (Direct Labor Rs per hour * project time)	= Rs 6,266 * 40 hours * 40 weeks = Rs 10,024,814 DL for project

Monetize one cost element and Estimate Should Cost

Calculate Direct Labor costs

$$= \text{Rs } 6,266 * 40 \text{ hours} * 40 \text{ weeks}$$

$$= \text{Rs } 10,024,814 \text{ DL for project}$$

Calculate Should Cost (Contract Price)

(Direct Labor Cost / Direct Labor %)

$$= \text{Rs } 10,024,814 / 0.403$$

$$= \text{Rs } 24,875,470$$

Element	%	Rs	Calculations
Direct Labor	40.3%	10,024,814	Rs 6,266 * 40 hours * 40 weeks
Service Overhead	17.0%		
Cost of Sales	57.3%		
GSA & Other Expenses	20.8%		
Profit Before Tax	21.9%		
PRICE	100%	Rs 24,875,470	= Rs 10,024,814 / 0.403

Use Industry Cost Profile to estimate the other cost elements

Element	%	Rs	Calculations
Direct Labor	40.3%	10,024,814	Rs 6,266 * 40 hours * 40 weeks
Service Overhead	17.0%	4,228,830	Rs 24,875,470 * 0.170
Cost of Sales	57.3%	14,253,644	Rs 24,875,470 * 0.573
GSA & Other Expenses	20.8%	5,174,098	Rs 24,875,470 * 0.208
Profit Before Tax	21.9%	5,447,728	Rs 24,875,470 * 0.219
PRICE	100%	Rs 24,875,470	= Rs 10,024,814 / 0.403

Supplier Proposal = Rs 30,000,000 Potential Savings 20.6%