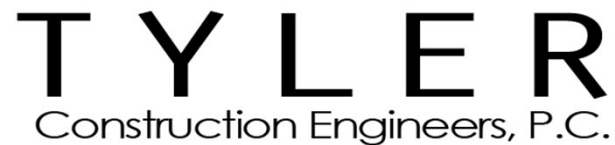


Workflows for Project-based Businesses

The Playbook of the  5B

TYLER
Construction Engineers, P.C.
www.tylerengineers.com

About Us



Tyler Construction Engineers, P.C. is a leading construction engineering and management consulting firm dedicated to serving small and micro businesses working within the Heavy Highway and Civil Infrastructure environment. We are industry insiders who understand operating the environment and challenges of small companies in the A/E/C industry.

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Victor C. Tyler, P.E., M.ASCE, NSPE

President of Tyler Construction Engineers, P.C., located in Nashville, TN. Over forty years of civil engineering, design, cost estimating and business management consulting.

Professional Profile

- Licensed Professional Engineer in the state of Tennessee
- Published Author - “How To Estimate Road Construction Accurately” – 2010
- Founder of RoadBidTemplates.com website featuring construction bidding templates for small contractors
- Strength in cost estimating, construction management, project scheduling, and construction financial methods.
- Member – ASCE, NSPE, TRBA

Education

- Masters of Science, Engineering Management, University of Tennessee
- Bachelor of Science, Civil Engineering, University of Tennessee



Striving for the next level



Running a successful contracting business is a lot of work. Many contractors feel overwhelmed and challenged to keep pace.

Which mean some tasks don't get the attention they deserve.

One of the most important activities that can drive the most significant financial benefit is unfortunately what often ends up neglected ... **PLANNING.**

Taking Time To Plan

In construction, you must take time to plan to have the right **person** in the right **place** at the right **time**, creating the right **plan**. When you successfully plan, it increases your ability to schedule productive teams, accurately track performance and stay on budget to **increase profits**.

Contractors need to adopt a more organized and structured approach to optimize the efficiency and effectiveness of their business processes.



Have you ever wanted a leg-up in the fiercely competitive world of construction?

Its about ...

- having a target
 - moving from uncertainty to clarity,
 - creating generational wealth
- ✓ Focus
 - ✓ Stop bidding on everything
 - ✓ Communicate your value
 - ✓ Mindset to dominate your market
 - ✓ Make meetings means something
 - ✓ Package services
 - ✓ Ask for referrals
 - ✓ Do promotions
 - ✓ Always provide customer care

Organized and Structured

Known and written processes will define the tasks your business needs to perform in order to achieve your objectives.

When written processes that support your way of doing business are missing or outdated, **disorder results**.

You desire consistency & accuracy.



"Think this is bad? You should see the inside of my head."

How do you ensure more consistency and accuracy across your projects?

ANSWER:

Create Predictability.



Cost

Schedule

Performance



Predictability

The key to operational excellence is predictable business processes.

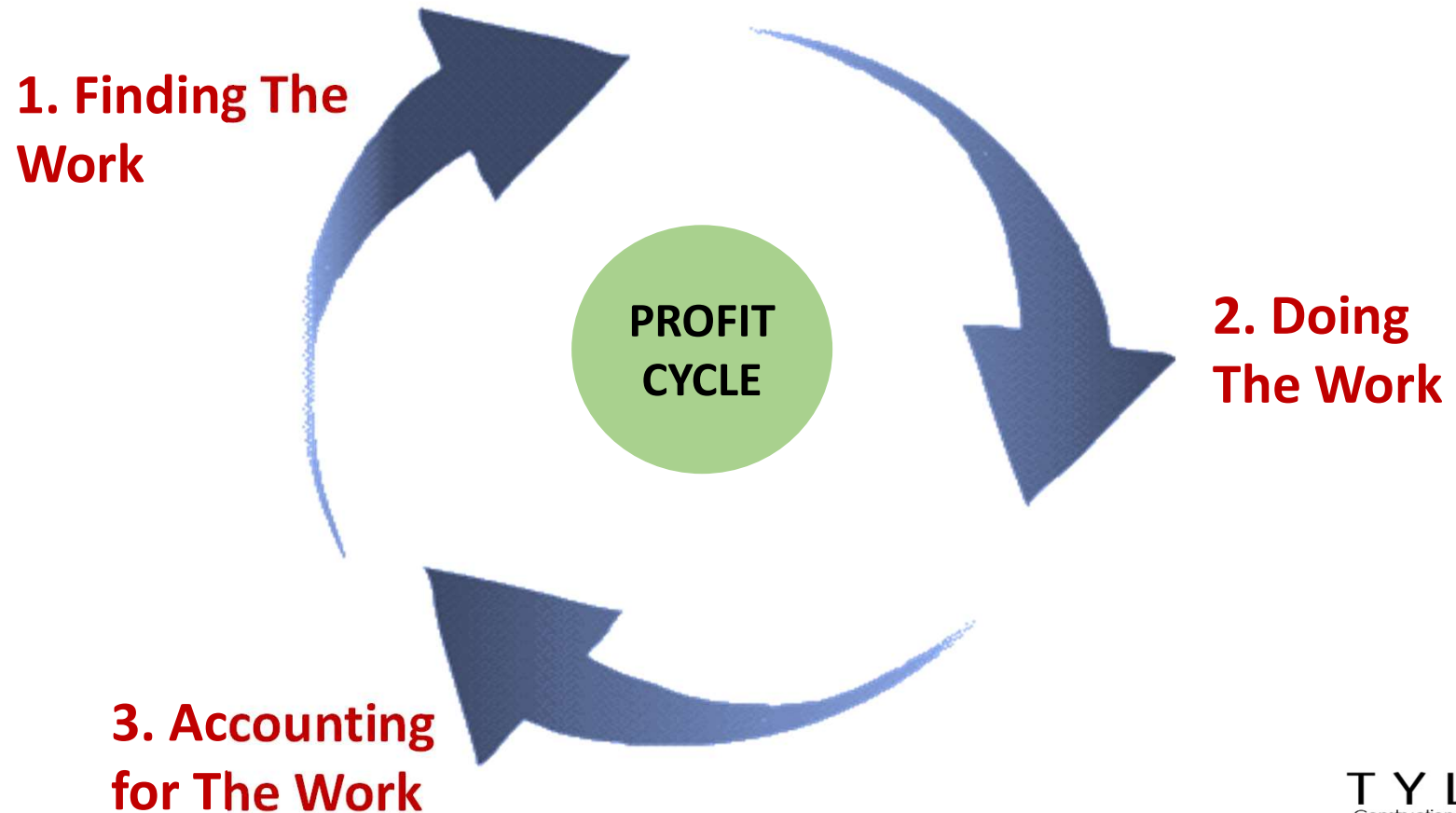
Business owners must have better control of their workflows throughout the business, thereby establishing an structured and repeatable **Business Model**.

Major Points:

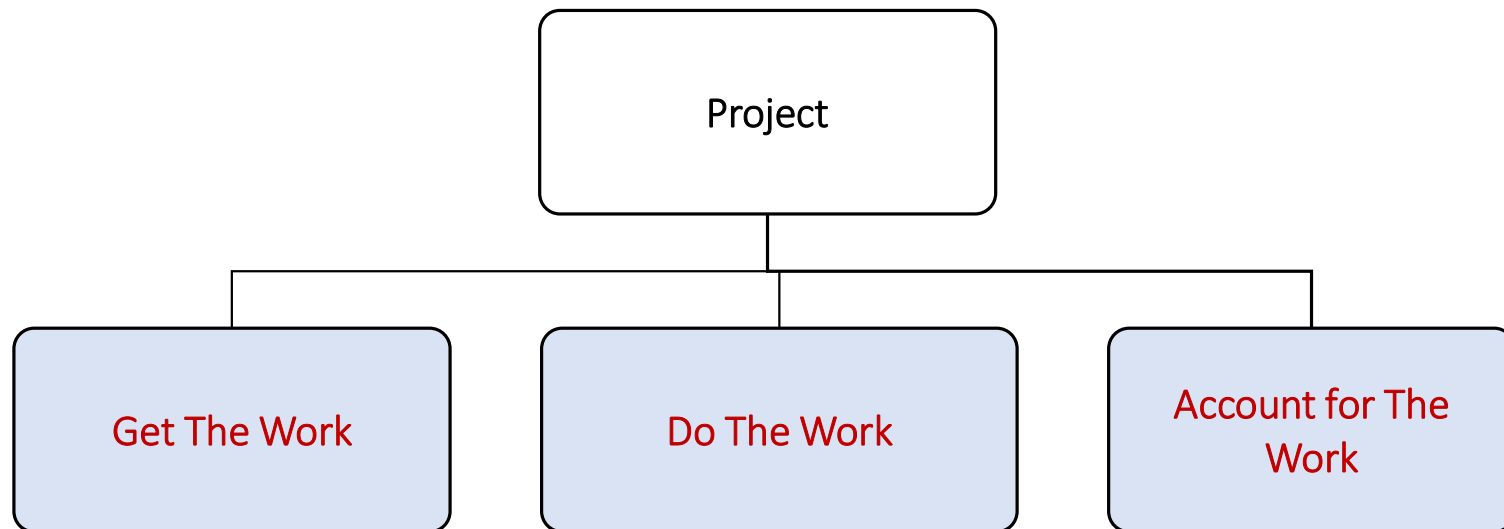
- ✓ Organized
- ✓ Structured
- ✓ Predictable
- ✓ Know Your Workflows



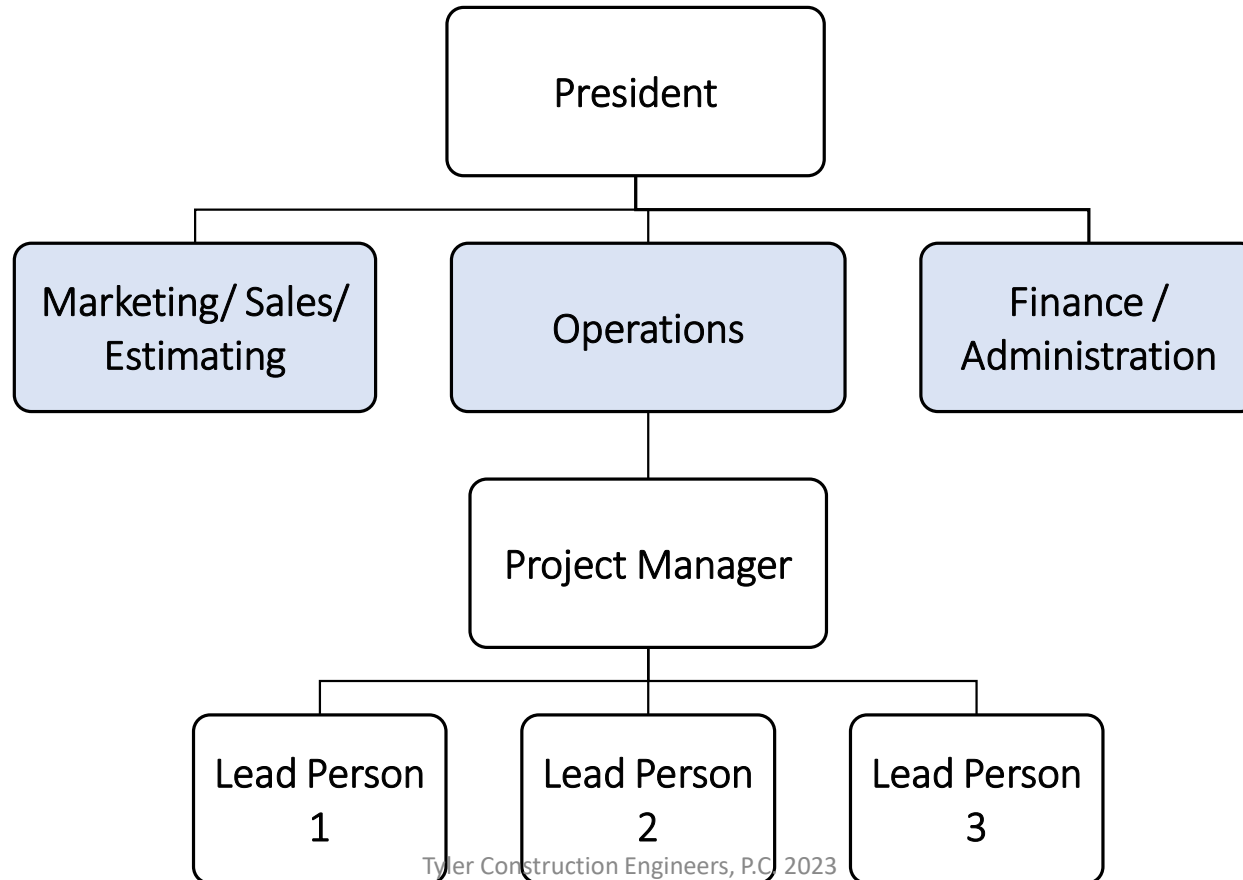
Identify the Primary Workflows in your business



Typical Project-Based Company



Typical Project-Based Company



What is a Project-based Business?

Fundamentally, a Project-based business is any company that delivers its goods or services to its customers through projects.

They are sometimes called *project-based, project-driven or project-centric* companies.



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Examples

Project-based companies operate in project-driven industries, including but not limited to architecture, engineering & construction, contract manufacturing, and all types of professional services.

Whatever the product or service is, if you are running and delivering projects to your customers, you are a Project Business.



Project-based businesses, especially construction contractors, have their own unique challenges that are best addressed by experts in the business of project delivery.

What is the template to assist small contractors to be more focused on ***Solutions To Succeed & Profitably Grow*** their business.



The 5Bs, is a rethinking of existing processes by simplifying the business processes to where the smallest contractors can easily implement.

The *5B* approach:

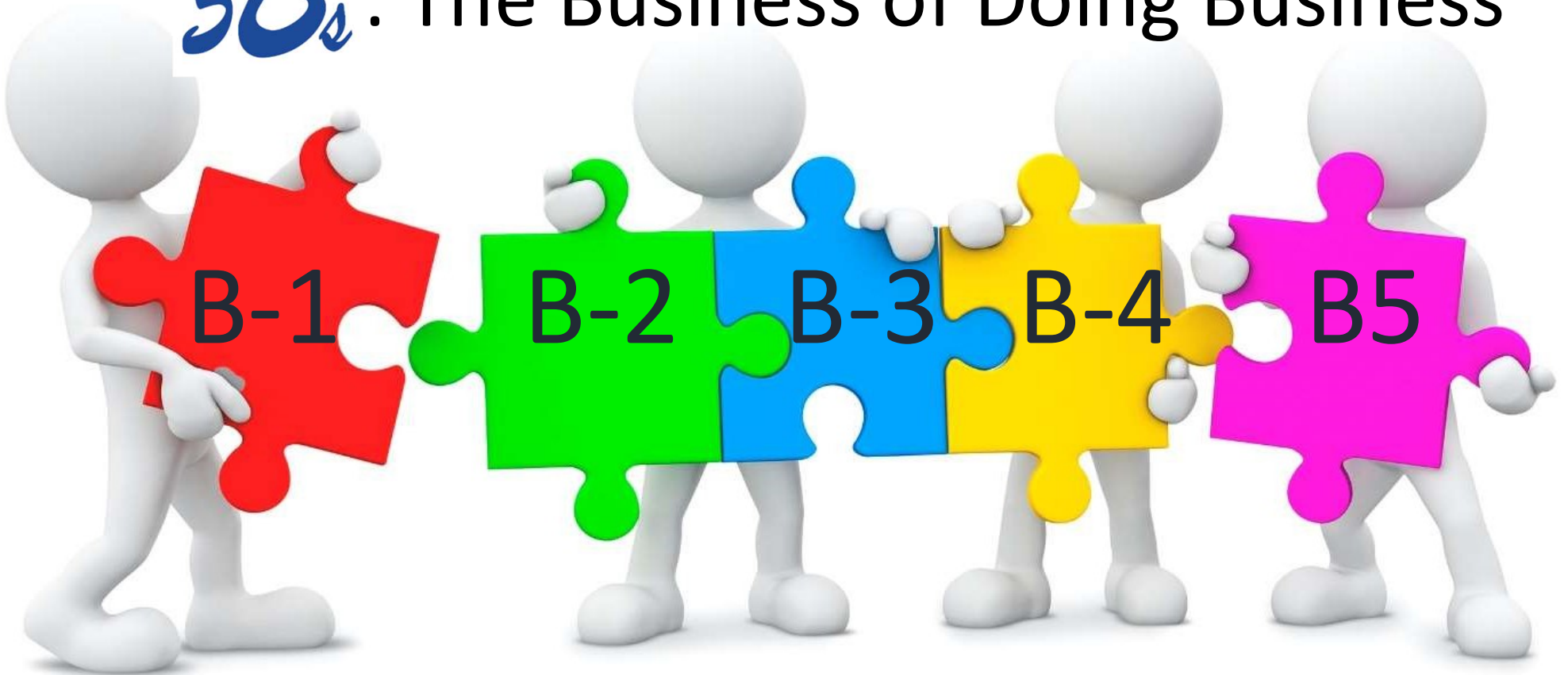
- Aligned to achieve what is most important it an organization.
- Makes it easier to get work done.
- Operates independently of the owner of the business.
- Endures beyond the owner of the business.



Defining the *5Es*

5B

The Business of Doing Business



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B-1

**Business
Development**

B-2

Bidding

B-3

Building

B-4

Billing

B5

Banking





B-1: Business Development/ Marketing



win more jobs –
more *profitable* jobs?

The **Business Development / Marketing** Module offers powerful processes to help you to:

- Win more jobs that look like you
- Build relationships that lead to profitable jobs
- Attract, train, keep and promote good team members

Business Development/ Marketing

Business Planning

- Mission, Vision & Values
- Annual Goals/ Objectives
- Business Model Generation
- Competitive Advantage
- Niche (location, cost, service)
- External Board of Advisors
- Budget / Profit Planning

Relationship Building

- Culture/Climate
- Website, Social Media, etc.
- Prospect/ Client Meeting(s)
- Subcontractors/ Suppliers
- Business Event Management
- Marketing Collateral
- Joint-Venture and Teaming

Human Capital

- Organizational Structure
(Documented Job Descriptions)
- Compliance *(Employee Classification, Payroll Procedures & Systems)*
- Policies & Procedures *(Employee Handbook, Onboarding & Training)*
- Leadership Development
- Succession Planning

One-Page Strategic Marketing Plan

SUMMARY -

VISION -

OBJECTIVES -

TARGET MARKETS -

MARKETING PLAN STRATEGY -

SALES FORECAST -

BUDGET SUMMARY -

PROGRESSION MEASUREMENT -

MARKETING STAFF & ACCOUNTABILITY -



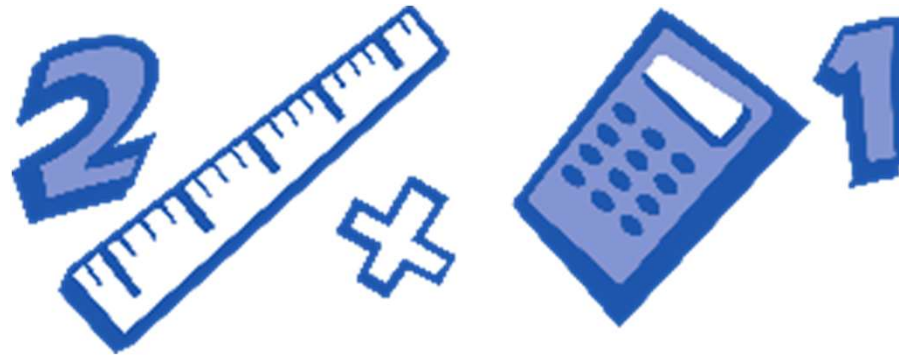
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Human Capital

Human capital is the one common thread that runs throughout the 5 B's of the business cycle. Without the human capital a business will fail to function efficiently and effectively.

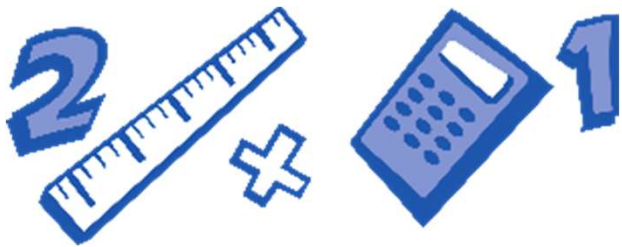
The art of building effective human capital relationships will prove to be a foundational must for any business that plans to grow and sustain in all areas of the 5 B's.





B-2: Bidding / Proposal Development

Cost first ... then Price!



Automate your bid and proposal generation as much possible

The **Estimating and Bid Module** offers you the ability to easily build and create more accurate cost estimates in less time by:

- Confidently answer the Bid/ No-Bid question
- Develop pre-built assembly cost items
(*use templates, checklists, software*)
- Price Change Orders quickly
- Accurately calculate Bid Markup Rates
- Establish your bid negotiation plan

Bidding / Proposal Development

Bid / No-Bid

- Project Experience
- Project Size
- Location
- Competitors
- Competitive Advantage
- Labor Availability / Expertise
- Client's Reputation

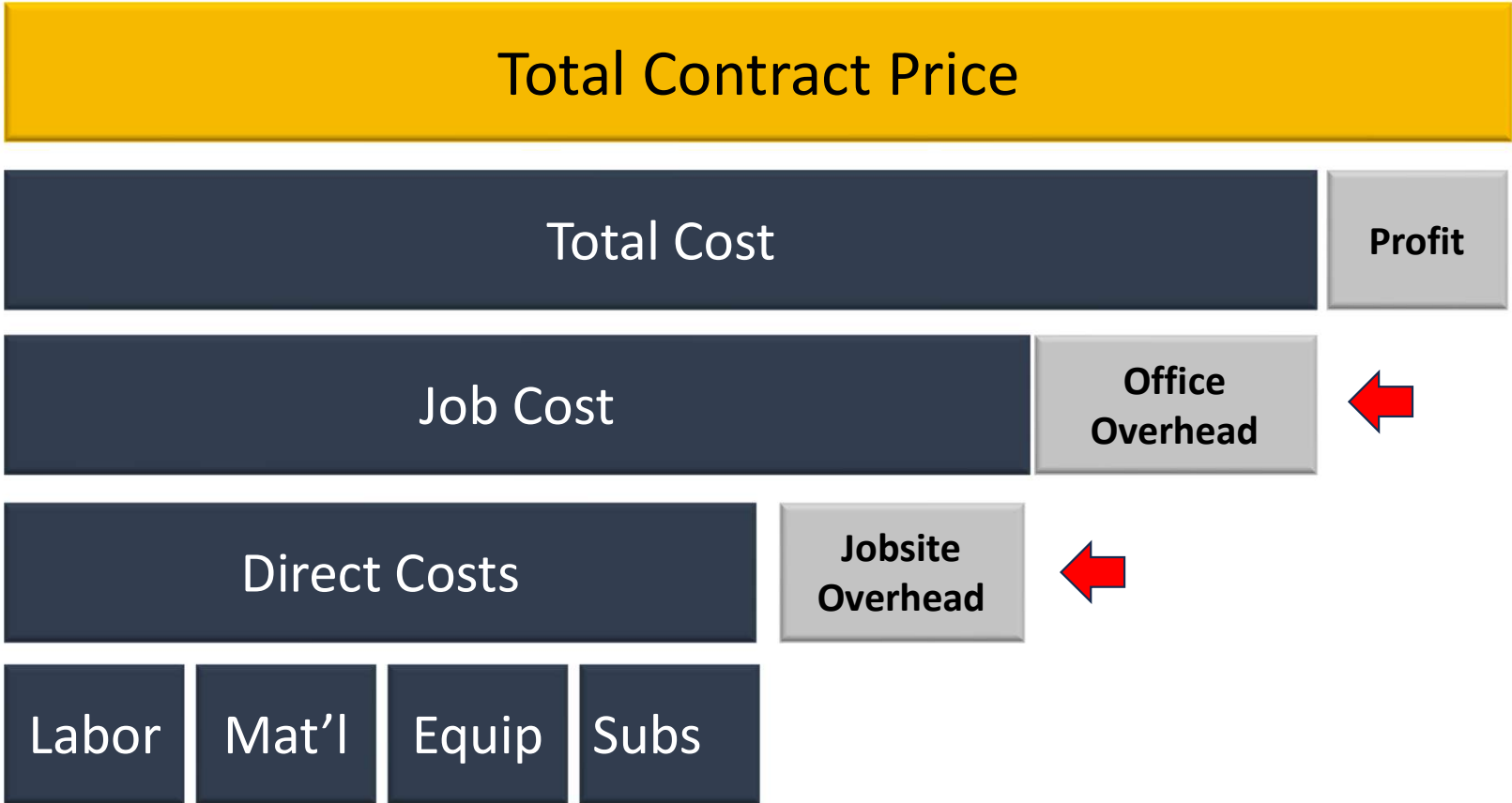
Estimating Costs

- Labor
- Materials
- Equipment (*Rental Rates*)
- Subcontractors/ Suppliers
- Other Direct Costs
- Overhead: Job & Home Office
- Loaded Labor Rate

Profit Plan

- Working Capital Required
- Cash Flow Scheduling
- Markup Allocation
- Profit Determination
- Bid Negotiation Plan
- Bid Policies & Procedures

Cost & Price Structure



Use Software or Custom Spreadsheets

Item No.	Item Description	Quantity	Unit	Bare Unit Cost	Total Direct Cost	Overhead /Profit	Total Price	Bid Unit Price
209-01	TEMPORARY SILT FENCE (WITH BACKING)	1,000.00	LF	\$ 3.03	\$ 3,030.31	\$ 1,235.06	\$ 4,265.37	\$ 4.27
Installation Rate	Production Rate	900.00	LF/Day			40.76%		
	Work Hours Per Day	8.00	Hours					
	Calculated Task Duration	1.11	Days					
	Total Crew Hours	8.89	Hours					
	Total Manhours	35.56	Hours					
Labor		Quantity	Unit Cost	Extended Cost	Notes:			
	Labor Foreman	1.00	ea.	\$ 25.00	\$ 222.22			
	Laborer	2.00	ea.	\$ 18.00	\$ 320.00			
	Equipment Operator	1.00	ea.	\$ 22.00	\$ 195.56			
Materials	Silt Fence Fabric with wire backing	1050.00	LF	\$ 0.80	\$ 840.00	Note: order 5% more of material costs for waste		
	Metal Posts (usually installed 4' o.c.)	251.00	ea	\$ 4.00	\$ 1,004.00			
	Staples or wire hog rings (5 ea. Per post)	1255.00	ea	\$ 0.02	\$ 25.10			
					\$ -			
Equipment	Mini Excavator / Farm Tractor with silt fence install	1.00	ea.	\$ 25.00	\$ 222.22			
	Crew Pickup Truck	1.00	ea.	\$ 15.00	\$ 133.33			
	Misc. hand and power tools	1.00	ea.	\$ 2.00	\$ 17.78			
Sub					\$ -			
					\$ -			
					\$ -			
					\$ -			
ODC	Provide Cups, Ice & water per day	1.67	Days	\$ 15.00	\$ 25.05			
	Misc Field Supplies (e.g. safety)	1.67	Days	\$ 15.00	\$ 25.05			
	Equip. move-in & out	0.00	Days	\$ 500.00	\$ -			
	Dump Fees	0.00	Ea	\$ 300.00	\$ -			

Bid Item Cost Summary		
Direct Cost Items	Amount	% of Price
Labor	\$ 737.78	17.30%
Material	\$ 1,869.10	43.82%
Equipment	\$ 373.33	8.75%
Subcontractors	\$ -	0.00%
Other Direct Cost	\$ 50.10	1.17%
Click Here to Use Overhead Rate Calculator		
Labor Burden	18.81%	\$ 138.77 3.25%
Jobsite Overhead	11.98%	\$ 362.89 8.51%
Home Office OH	9.63%	\$ 340.01 7.97%
Profit	8.00%	\$ 309.76 7.26%
Bond	2.00%	\$ 83.63 1.96%
Make Your Price Adjustment (if any)		
Total Price (calculated)	\$ 4,265.37	100.00%
Upon review: Adjust Price (+/-)	\$ 0.00	0.00%
Adjusted Total Bid Price	\$ 4,265.37	100.00%
Bid Unit Price Submitted	\$ 4.27	

Typical Production Rates Per Day			
Erosion Control	Low	Average	High
Silt Fence	200	1,000	1,700

Note: use lower rates for steep, rocky terrain, or heavy trees





B-3: Building / Project Execution



Predictive Normalcy in Your
Operations with reduced risk

The **Building /Project Execution Module** offers you the ability to operate like a well-oiled machine, by creating:

- Better pre & post-award collaboration and management processes
- Greater field productivity in your People, Processes, and Procedures
- Communication is key

Building / Project Execution

Pre & Post Award Prep

- Business Registration(s)
- Contractor Licensing
- Pre-Qualification /Certification
- Insurance
- Bonding
- Capability Statement
- **Contract Knowledge**

Project Management

- Scope/ Time/ Cost/ Budget/ Schedule
- Labor / Subs/ Suppliers
- Material Procurement
- Scheduling
- Project Budget / Cash Flow
- **Customer Care**
- **Communicate³**

Risk Management

- **Documentation** & Submittals
- Daily Report Filing
- Cost Capturing
- **Health & Safety Monitoring**
- Cyber Security
- Employee Engagement
- Policies & Procedures

Scope/ Time/ Cost/ Budget/ Schedule

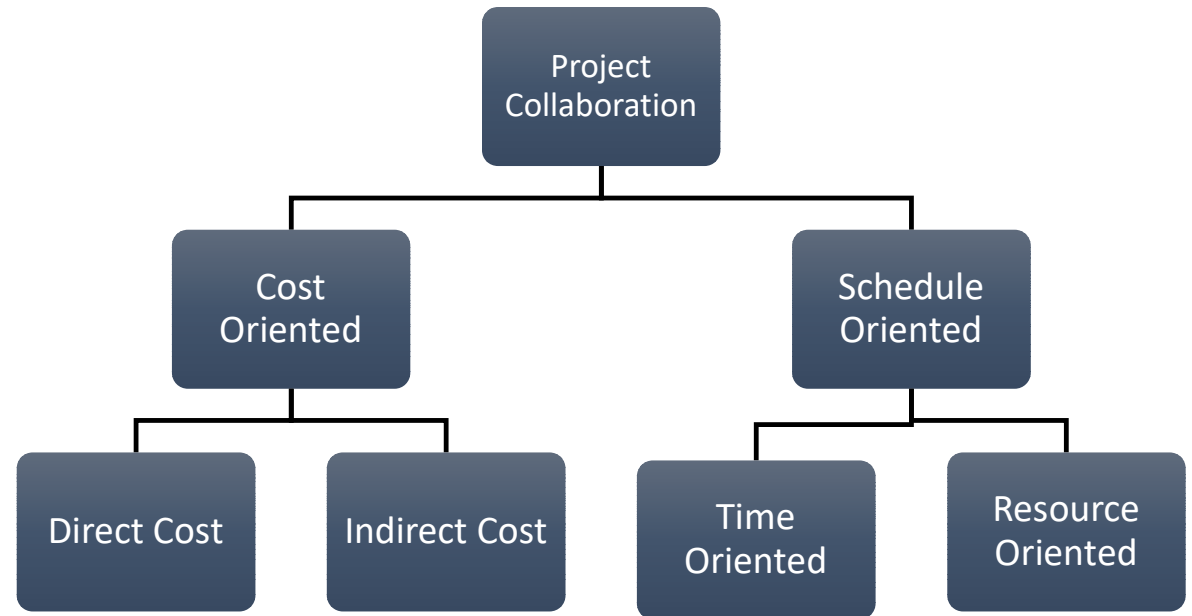
Template Work Plan_sample - Microsoft Excel

Task	Responsible	Status	Year 1												Year 2														
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Baseline survey																													
Design survey	Program Manager	Complete																											
Recruit data collectors	Program Manager	Complete																											
Collect data	Field Officers	Complete																											
Enter data	Admin Team	In progress																											
Analyse data	Technical Advisor	Overdue																											
Write report	Technical Advisor	Overdue																											
Recruitment and training																													
Recruit peer educators	Training Manager	In progress																											
Training - HIV	Trainers	Not started																											
Training - Family planning	Trainers	Not started																											
Training - Nutrition	Trainers	Not started																											
Training - Gender based violence	Trainers	Not started																											
Training - Vaccinations	Trainers	Not started																											
Training - Gender based violence	Trainers	Not started																											
Training - TB	Trainers	Not started																											
Training - WASH	Trainers	Not started																											
Stakeholder engagement																													
Orientation meeting	Program Manager	Not started																											
Quarterly meetings	Program Manager	Not started																											
Newsletter updates	Program Manager	Not started																											



Incorporate Technology In Your Process... *Now!*

- Accounting
- Job Cost
- Estimating
- Scheduling
- Human Resources
- Time Sheets
- Field Notes
- As-builts
- Close-out Process





B-4: Billing / Contract Accounting



See where your business is earning profits, and where you need to improve your estimates?

Billing / Contract Accounting Module affords you the ability to create more accurate cost reports by creating:

- Use industry specific Chart of Accounts
- Manage Accounts Payables/ Receivables by job
- Create invoices faster
- Report Cost and Profitability by job

Billing / Contract Accounting

Accounting Policies

- Chart-of-Accounts
- Daily, at least weekly Inputs
- Financial Report Generation
- Written Policies & Procedures

Job Costing

- Frequent information flow from Project Supervisors
- Purchase Order Procedures
- Change Order Procedures
- Recording Expenditures
- Reviewing Budget vs Actual
- Weekly meeting w/ office and field staff

Invoicing

- Document how to Bill Clients
- Accurate Cost Capturing
- Timely Customer Invoicing
- Monitor Collection Process
- Timely Deposits

B-4 Billing/Contract Accounting

Considered the **Hub of the 5Bs**

- Receives input, information, and request from other Bs
- Processes input and analyzes or interprets information and request
- Returns input, information, and request in the form of data and/or as a customized report

Produces the entity's **financial report card**

- Balance sheet (financial position)
- Profit & Loss statement (financial activity)



Manages **all aspects** of operations

Customers

Revenue

Vendors

Cost

Assets

Expense

Liabilities

Unallowable

Equity

Profit



B-5: Banking/ Borrowing/ Bonding



Create wealth for you and your employees?

Our **Banking Module** shows you how to perform industry based financial analysis to help you make rapid, informed business decisions concerning:

- Working Capital Strategy
- Borrowing and Bonding Capacity
- Financial Management
- Equipment Purchases
- Budgeting & Forecasting
- Investing / Wealth Building

Banking, Borrowing & Bonding

Working Capital Strategy

- Cash Flow Planning
- Line of Credit
- Surety Credit
- Capacity Building
- Budget vs Actuals

Financial Management

- Financial Ratio Analysis
- Key Performance Monitoring
- Annual Budget Forecasting
- Annual Staff Salary Reviews
- Equipment Acquisition Plans
- Meeting with Management

Wealth Building

- Company Savings Account / Other Income
- Employee Benefit Plan
- Succession Planning
- Key Person Insurance
- Owner Deferred Compensation

5B - Banking, Borrowing & Bonding

Produces the entity's financial report card

- Balance sheet (financial position)
- Profit & Loss statement (financial activity)

Provide Key Performance Indicators (KPI) and Industry Ratio Analysis

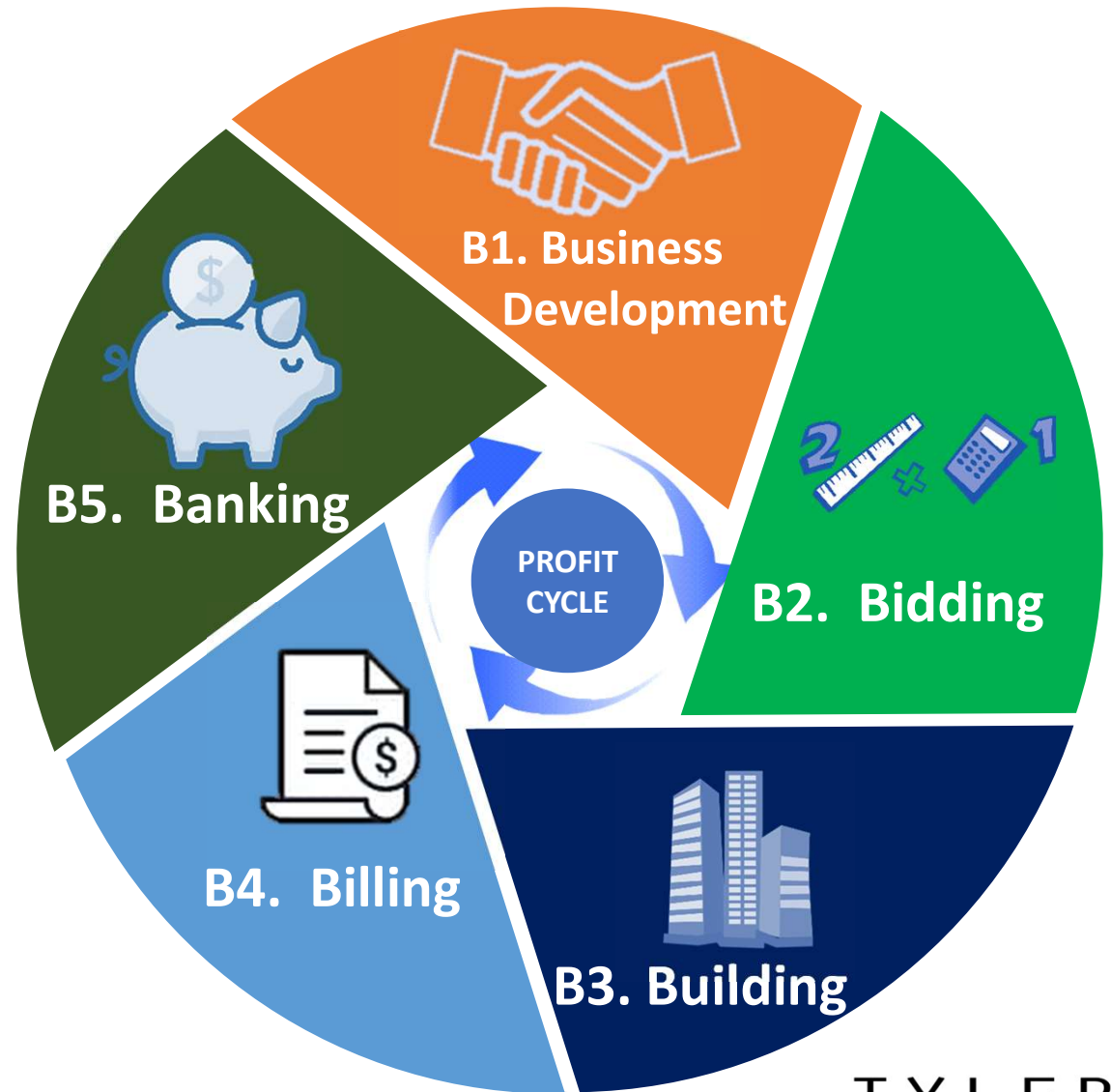
Governed by comprehensive policies and procedures

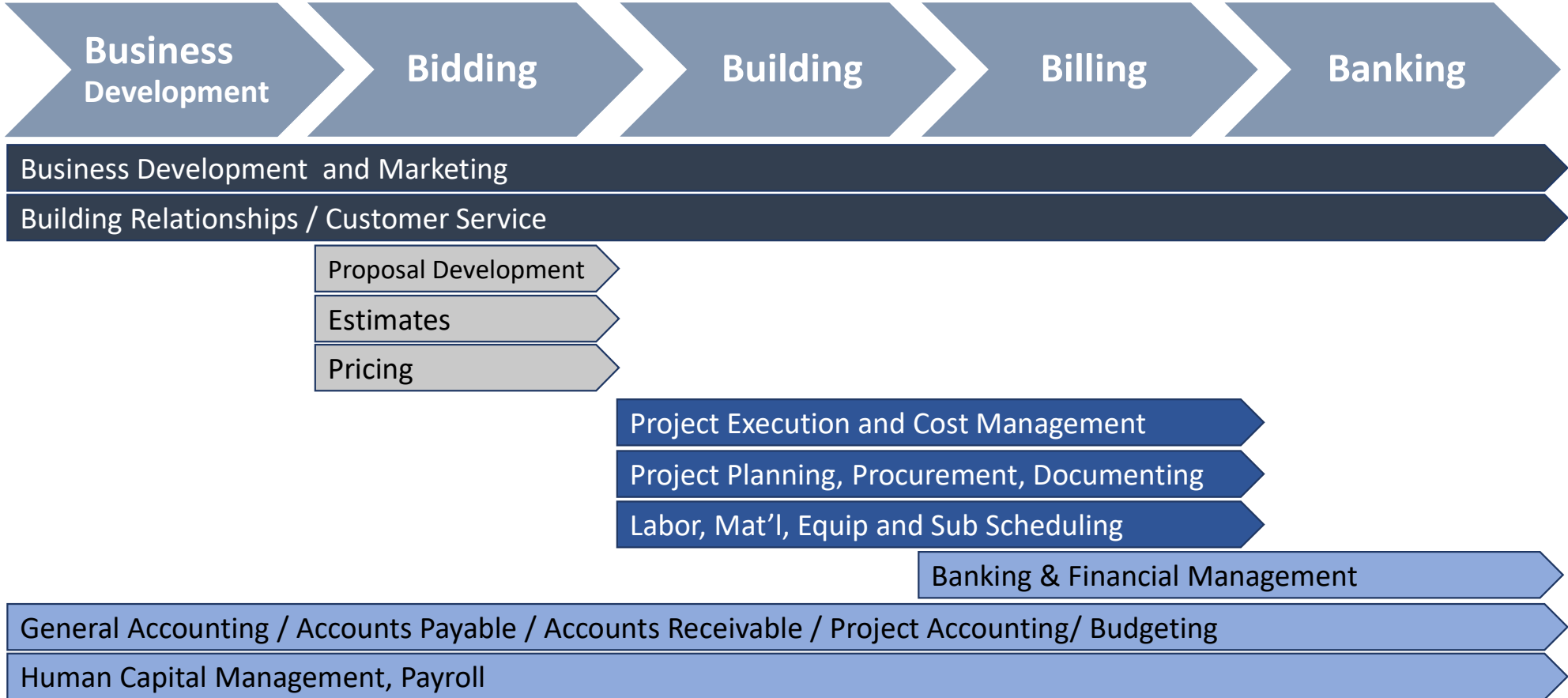


Accounting Effects Every Aspect Part of Your Business

- Business Development/Marketing
Identifies best markets and job types; sales by customer; profitable customers.
- Bidding/Estimating
Assist in calculating gross margin; indirect costmark up; G & A and Profit rates.
- Building/Project Management
Actual job cost vs budget performance.
- Billing/Accounting
Paying bills; preparing sales invoices; cash management; job cost reports.
- Banking/Wealth Building
Bonding; cashflow analysis; investing; benefits; retirement plan.

5B Modules





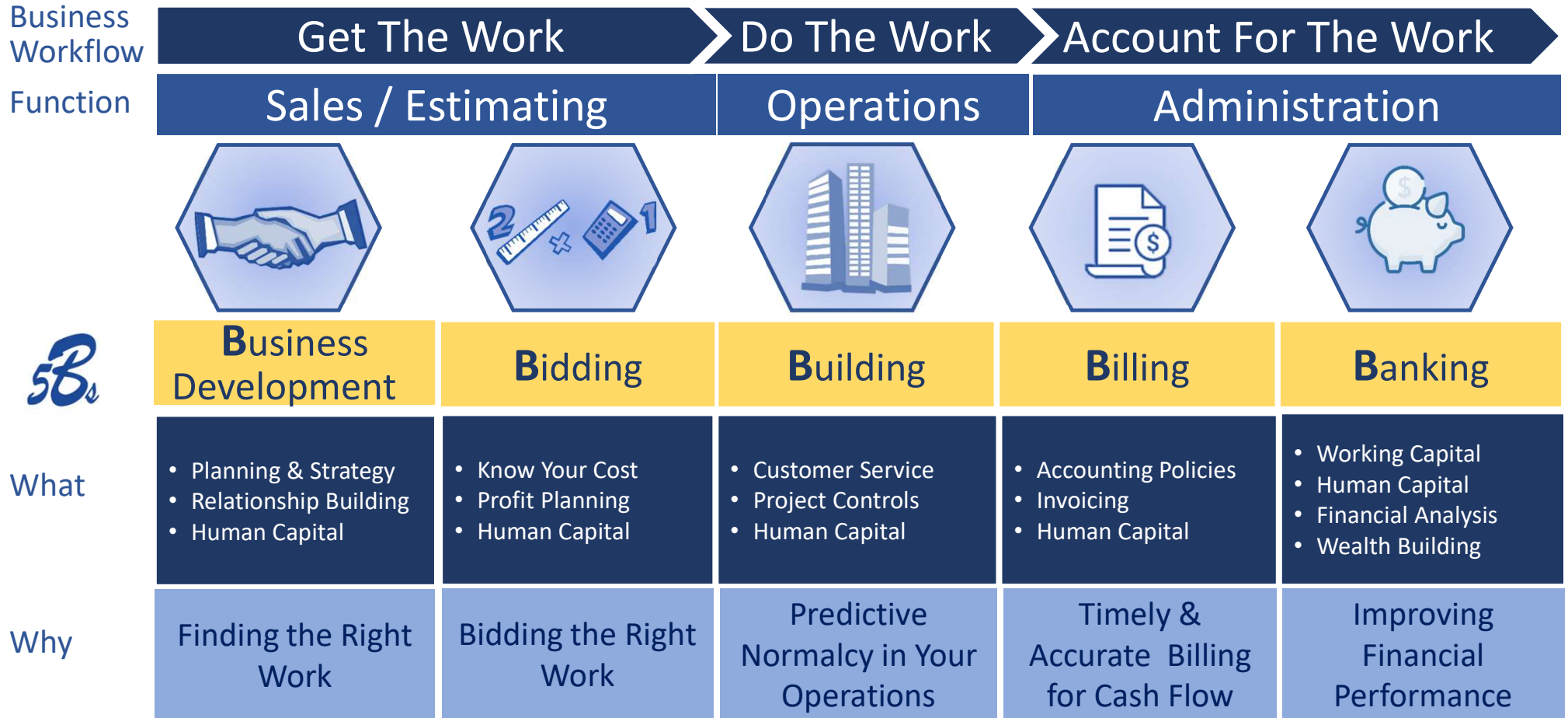
Contractors across the world practice the 5Bs, but most are doing so unknowingly and unequipped. But if documented and practiced...

Benefits are:

1. Present a more professional face to the customer
2. Increase utilization of employees and equipment
3. Increase total throughput and productivity
4. Achieve project visibility and controls with regard to cost and timeline
5. Schedule work, people and equipment more intelligently
6. Track, manage and make decisions based on profit



Project-based Business Workflow



Any Questions?





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