



# Managing your Business, Financial Position and Risk through KPI's & Dashboards



# Why??

• Every contractor is faced with the same basic premise:

# Limited Resources

• The organization that leverages its "Limited Resources" to create the most repeatable, scalable processes is the one that will succeed.



## Today – Your Limited Resources

- Know what you're trying to accomplish and why..
- Keep yourself accountable
- Move beyond traditional financial "rear view mirror" performance measurements



# Performance Management

## Key performance indicators

<u>Lagging indicators</u> – Passive metrics of prior results. After the fact.

<u>Current indicators</u> – provide almost immediate feedback on present activities

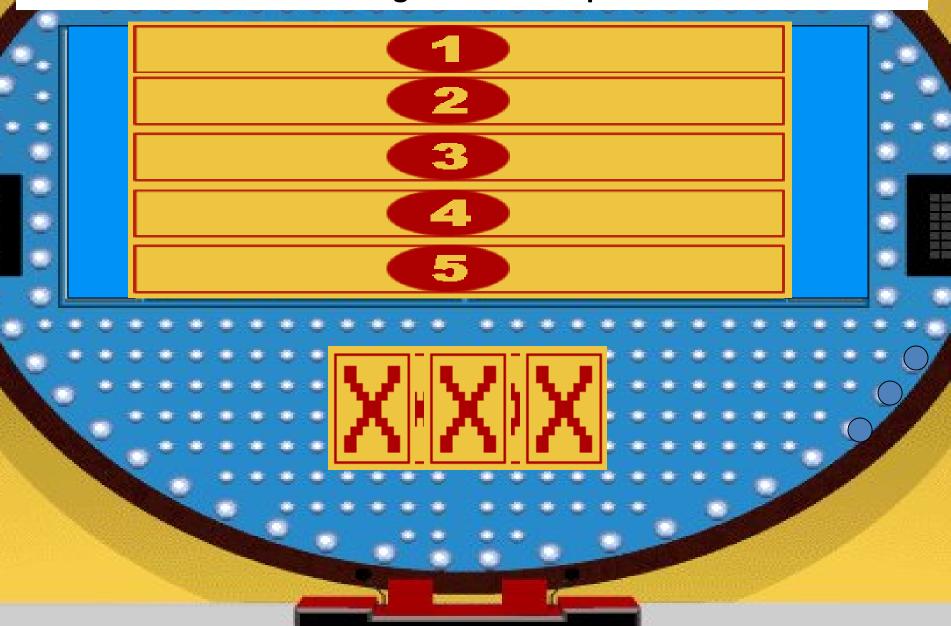
<u>Leading indicators</u> – proactive measures of focused activities to prevent or encourage general or specific incidents



## Management of People

#### Management of People

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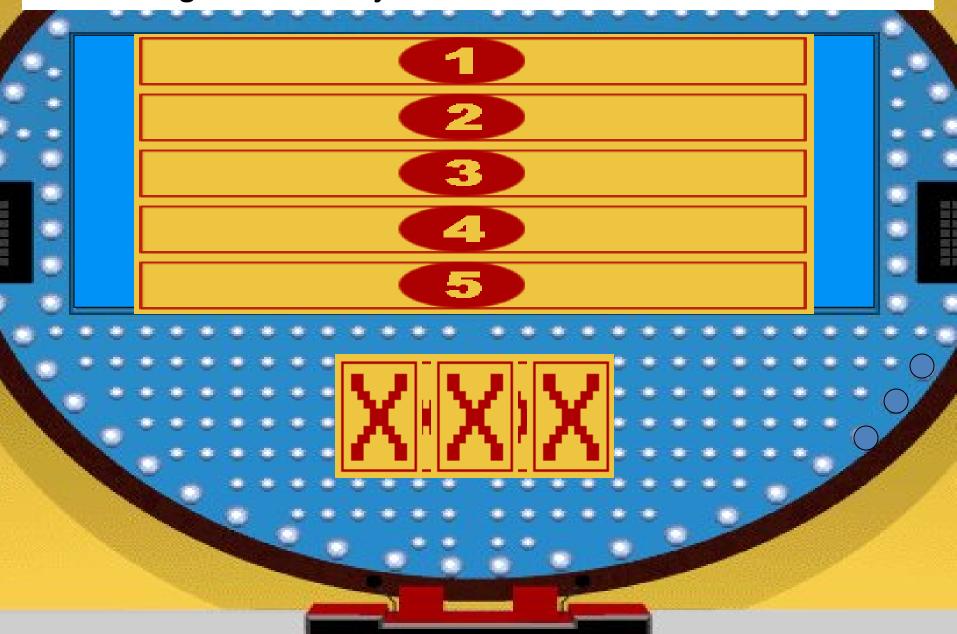
#### People Management – KPIs

- Average employee longevity
- CPE hours by position by employee
- % of employees that participate in training program
- % of responses to employee survey
- X amount of community service hours per employee
- X% of annual reviews completed on time
- % of vacation days used
- Average tenure
- New hire 90 day failure rate
- Training cost per employee
- Diversity rate
- D&I initiatives implemented



# Clients and Business Development

#### Management of Project Sales and Customer Satisfaction





## Project Sales / Customer Satisfaction - KPIs

- % of "Go / no go" forms completed
- % responses to customer satisfaction survey
- Number of quality bids per month
  - Broken down by geography, business unit, etc.
- Number of personal executive visits with key customers
- Number of owner meetings during a project tenure to < >
- Number of meetings with prospects
- Deals close vs. goal
- Weighted pipeline
- Individual sales activity (# call / meetings / etc.) vs. results



# **Project Delivery**

Management of Project Delivery.





## **Project Delivery - KPIs**

- % compliance with <u>key</u> internal project delivery policies and procedures
  - Initial budget meeting
  - Hand off meeting
  - Cost to complete meetings
  - Weekly subcontractor meetings
  - Weekly PM / Supt operations review
  - Regular owner meetings
  - Project close out meeting
- Pending change order value
- Scope change requests vs. approvals
- Open RFIs
- Underbilling %
- Days o/s in WIP
- Equipment / small tool utilization %



# Traditional Performance Measurement From a Financial Perspective



# **Financial**

- Traditional balance sheet and income statement ratios
- Financial indicators are lagging. These are usually the result of matters in other areas.
- Need to ask the 5 layers of why.
- Still very important. The bottom line is still the greatest performance index.



- Compared financial ratios to:
  - Budgeted & forecasted goals that tie into strategic plan
  - Peer data / Benchmarking
- Benchmarking resources
  - CFMA Survey
    - Average by category
    - Best in class
  - Public companies
  - Peer groups / roundtables
  - Captive groups



- Balance Sheet Strength
- Operational Performance
- Cash Flow / Liquidity
- Stockholder Return



- Balance Sheet Strength
  - Maximize tangible & eligible working capital
  - Working capital turnover
  - Equity to revenue
  - Debt to equity
  - Underbillings to equity
  - Fixed asset ratio
  - Months in backlog



- Operational
  - Gross profit percentage
  - Open vs. closed jobs GP % Trend of years
  - SG&A as a % of revenue
  - Self performed profitability
  - Profitability by:
    - Project manager
    - Industry type
    - Contract size



## • Cash Flow / Liquidity

- Quick ratio
- Current ratio
- Days in accounts receivable
- AR Balance over 90 days
- Retention as a % of total AR or WIP
- Under and over billings as a % of WIP
- Cash flow status on individual job basis
- Days in accounts payable
- Interest expense ratios

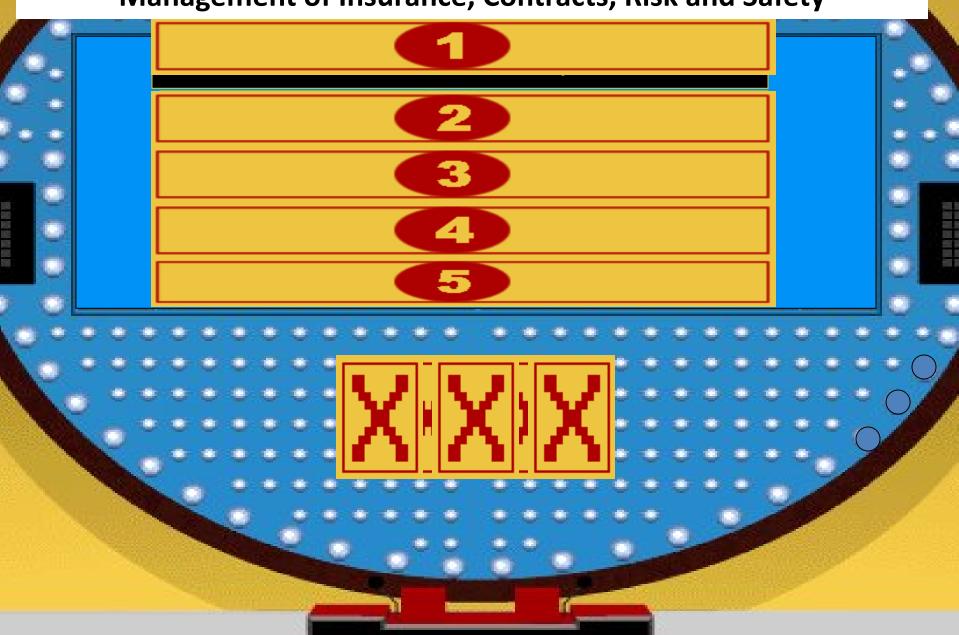


- Stockholder's Return
  - "Normalize" net income to measure return
  - Return on assets
  - Return on equity
  - Return on sales
  - Enterprise value



## **Risk Management Process**

#### Management of Insurance, Contracts, Risk and Safety





## **Risk Management - KPIs**

#### SAFETY RELATED

Lagging

- Reduce # of recordable injuries by < >%
- Reduce EMR to .xx or less
- Reduce lost time work hours by < >%

**Leading** 

- Increase the # of safety orientations conducted
- # of tool box talks or safety meetings
- Increase # of site visits and safety audits by < >%



#### **Risk Management - KPIs**

#### <u>Other</u>

- Reduce the % of work performed without a signed contract with both owners and subs
- % of subcontract dollars properly pre-qualified
- % of new work properly subjected to due diligence procedures
- Adequate insurance certificates obtained prior to beginning work

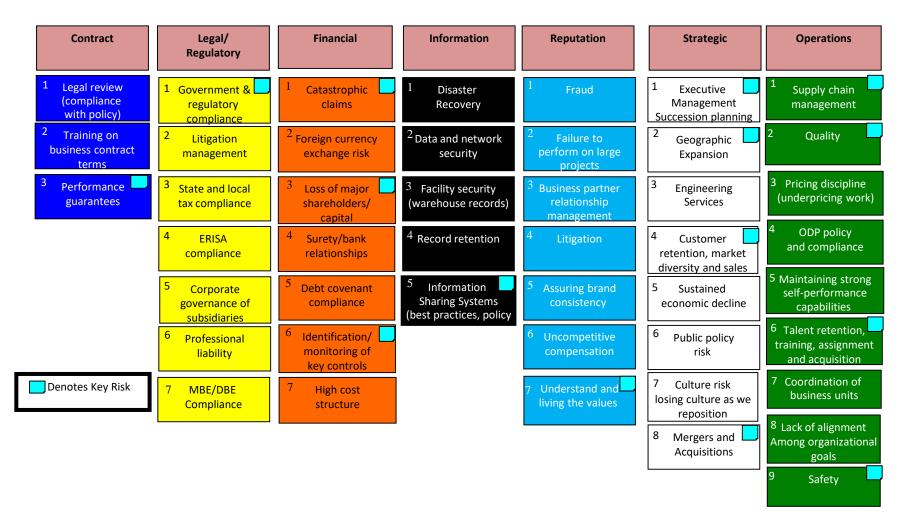


#### Sample Scorecard Metrics and KPI's

| Scorecard Area of Measurement  | Calculation  |  |  |  |
|--|--|--|--|--|
| Safety   |  |  |  |  |
| Date of Last Inspection on the Project   | 100% if you have received an inspection within last 14 days <b>(YES)</b> and 50% if it has been over 14 days <b>(NO)</b> .                                   |  |  |  |
| Number of Inspections Received on Project Total                                | 100% for an average of one inspection every 2 weeks.<br>Lose 10% for each inspection that occurred late.   |  |  |  |
| Tracking Safety Violations & Issuing Notices in PM Software                    | 100% if a log is established <b>(YES)</b> and 0% if no log has been established <b>(NO)</b>  |  |  |  |
| Are All Insurance Certificates for Project on File (Yes or No)                 | Yes 100% No 0%   |  |  |  |
| Number of Insurance Certificates for Project having Expired Dates              | 100% for no expired insurance certificates. Lose 15% for each expired insurance certificate.   |  |  |  |
| Tool Box Safety Talks Held & Checklist Completed (Yes or No)                   | 100% for turning in the completed paperwork on Monday with Payroll (YES) and 0% if it is late or missing (NO)  |  |  |  |
| Field and subcontractor JHA's (Job Hazard Analysis) Reports Received<br>Timely | Yes – 100%;No 0%   |  |  |  |
| Number of Safety Violations on Project Reported for Company                    | 100% for no violations found. Lose 5% for every violation found. This is cumulative for job to date.   |  |  |  |
| Number of Safety Violations on Project Reported for Subs                       | 100% for no violations found. Lose 2% for every violation found. This is cumulative for job to date.   |  |  |  |
| Number of Lost Time or Recordable Accidents to Date on Project                 | 100% for no lost time or recordable accidents. Lose 10% for each recordable accident and 25% for each lost time accident. This is cumulative for job to date |  |  |  |
| Number of Property Loss Insurance Claims to Date                               | 100% for no Insurance Claims for lost, stolen, damaged property or equipment. Lose 20% for each incidence  |  |  |  |
| Number of Workers Comp Loss Claims to Date                                     | 100% for no Workers Comp claims. Lose 50% for each claim   |  |  |  |
| Safety - Average Score   |  |  |  |  |



#### Risk Profile Map Legend





## Contractor Risk Assessment – KPI Measurement via Internal Audit "Light"

- Some KPI's around operational risks are difficult to measure because they rely on the assumption that the SOP is being carried out
- You have a need to assess and monitor these risk areas of your business
- Most of you may not have time or dedicated staff for this "monitoring" role
- This session will discuss what risk areas may be the best to focus on and how to approach the task of mitigating risk including an internal audit "light" program to measure KPI's and compliance



## Potential Internal Audit "Light" Structures

- Who
  - Financial Risk Assessment Team (CFO/Controller/Project Accountant)
  - Comprehensive Project Risk Assessment Team (CFO/COO/Estimating Dept. PE/Project Management/Project Accountant/Safety Director/Scheduling Assistant)
  - Peer Risk Assessment Team (CFO/"Peer" Project Management Team/COO/Safety Director/Scheduling Assistant)
- What
  - Select Testing of Risk Attributes Across the Entire Organization
  - High Risk Project Characteristics: Inherent Contractual Risk; Low/Tight Bid; Site Concerns or Issues; Tough Subcontractor Environment; New Geography; New Type of Project or Customer; Weather Delays; Design Changes/Issues; Compressed Work Schedule; Significant Liquidated/Actual Damages
  - Initial Project Review/Audit: Select Projects in the 20-25% Completion Range
  - Final Project Review/Audit: Select Projects in the 75-85% Completion Range



#### **Construction Risk Assessment**

#### Identify Key Risk Areas (GREEN = Covered Today)

- Bidding & Estimating Parameters
- Pre-qualification Process
- Contract Risk Summary/Assessment
- Standard Procurement & Buyout
- Subcontractor & Supplier Agreements
- Change Order Management
- Progress Billing & Lien Releases
- Contract & Project Monitoring
- Bonding & Insurance Compliance
- Estimated Cost at Completion Brokered & Self-Performed
- Schedule Updates & Monitoring
- Control, Use of and Transfer of Contingencies
- Fraud Assessment & Detection





- RISK AREA: Pre-qualification Process Documentation
  - Financial Diligence
    - FS Scope
    - FS Concerns
    - Z-Score
  - State Licensing
  - Surety Credit Letter
  - Bank Reference
  - Trades/Expertise
  - M/W/S/DBE Certification
  - Insurance Compliance

- Geographic History
- Project Team Qualifications
- Safety Record/EMR
- OSHA History
- Outstanding Litigation
- QAQC Plan
- Current Backlog
- Size of Project Experience
- Customer/Vendor References





#### RISK AREA: Contract Risk Summary/Assessment

- Prime Contract: Legal/Financial Risk Assessment of "Killer" Contract Clauses & Project Management's Plans
- Subcontract and Blanket Purchase Order Agreements: "Boiler Plate" and "Non-Negotiable" Clauses Unchanged or Approved
- Project Management Contract Brief & Risk Assessment
- Reporting Requirements Compliance Upward/Downward:
  - Schedule
  - Monthly Report Updates
  - Logs (CO/RFI/CCD)
  - As Builts
  - DBE/WBE/MBE
  - Certified Payrolls
- Owner Right to Audit Clauses "Proactive" Approach Taken
- Notice Requirements Compliance Weather, COs, PCOs
- Contingencies: Types, Use, Approval, Control



#### RISK AREA: Subcontractor & Supplier Agreements

- Subcontractor/Supplier Commitments = K + CO's
- Executed by Authorized Representatives
- Prime Contract Subcontractor/Supplier Requirements have been effectively included in Subcontract Agreement Scope
- Sales Tax Concerns (Suppliers) Breakout
- Joint Check Arrangements & Support Adequate
- Retainage Provisions Implemented = K
- In Absence of a Bond, Administrative Plan for Project Monitoring of Performance & Payment was implemented and approved, and is being Managed and Carried Out
- PB Schedule of Values >/= Total Completed & Stored To Date



#### RISK AREA: Change Order Management

- Owner Change Orders Are Signed and Amounts Walk
- Time Extensions Are Current & Extended Overhead Incorporated (Recoverable or Unrecoverable)
- Coding of Owner Change Orders is Consistent & Reasonable
- For Subcontractor Change Orders, Support is Detailed, Reasonable and Reviewed/Vetted with Mark-ups Consistent with Prime Contract/Subcontract Agreement
- Labor Rates/Burdens Are Being Reviewed and Challenged
- Back-up & Support Tickets Are Executed and Signed Off
- Logs are Up To Date (ACO's, PCO's, CCD's)
- All Subcontractors are Circularized on Impact of Changes and Responsive
- Change Order Amounts of a Claims Nature Are Coded/Tracked Separately
- Proceed change orders are tracked separately as PCO's
- PCO's awaiting owner decision or direction are tracked separately



#### RISK AREA: Bonding & Insurance Compliance

- Surety Bonding of Subcontractors/Suppliers
  - Treasury-Listed Surety
  - Validate Name of Sub/Project
  - Power of Attorney
  - Project/Penal Sum=Contract
  - Company Form
  - Claimant Definition
- Insurance: Prime Contract Requirements </= Subcontract Requirements
- Additional Insured Endorsements
- Notice of Cancellation >/= 30 Days
- Rated Carriers > A; Limits = Contract; Limits "Apply Per Project"
- Builders Risk in Place
- If Owner Provided, Builders Risk DIC/DOC & Reviewed By Agent
- Insurance for Stored Materials



#### **Reporting of Results**

#### Summary of Report of Findings by Risk Area

- Summary of Project Scope
- KPI Compliance
- Pervasive Risk Observations
  - Attention to Immediate Risks
  - Secondary Risk Observations
- Observations & Recommendations
- Best Practices for Use by Other Projects
- Changes in Company Operating Guidelines & Procedures





# Performance Management

# Supporting Technology

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|  | Previous    | Current     | Default Target | Margin (Dollars)    |
|--|-------------|-------------|----------------|---------------------|
| Company Scorecard                            |             |             |                |                     |
| Project Securement and Customer Satisfaction |             |             |                | 10000000            |
| Grow Revenue/Margin from New Customers       |             |             |                |                     |
| Margin % from New Customers                  | 7%          | 6.5%        | 7% 🔵           | 8000000             |
| Margin \$ from New Customers                 | \$6,100,000 | \$6,500,000 | \$7,000,000 🔵  |                     |
| Meetings with New Customers                  | 5           | 8           | 10 🛆           |                     |
| Proposals with New Customers                 | 4           | 5           | 4 🔵            | New                 |
| Grow Revenue/Margin from Existing Customers  |             |             |                | 4000000 - Existin   |
| Grow Revenue from New Services               |             |             |                |                     |
| Improve Customer Satisfaction                |             |             |                |                     |
| New Customer Satisfaction                    | 82%         | 84%         | 90% 🔵          |                     |
| Existing Customer Satisfaction               | 78%         | 75%         | 90% 🛆          |                     |
| <ul> <li>Operational Excellence</li> </ul>   |             |             |                |                     |
| Improve Quality                              |             |             |                | 2007 2006 2006 2006 |
| Project Margin                               | 6.7%        | 6.4%        | 0.07 🔴         | Q1 Q4 Q3 Q2         |
| Warranty Cost                                | 0.31%       | 0.3%        | 0.1% 🛆         | Calas Evenal        |
| Customer Referrals                           | 4           | 2           | 5 🛆            | Sales Funnel        |
| Rework                                       | 0.6%        | 0.5%        | 0.2% 🛆         | 60                  |
| Defect Counts                                | 21          | 24          | 10 🔶           | 50                  |
| Increase Estimating Accuracy                 |             |             |                |                     |
| Reduce Waste in Procurement Process          |             |             |                | 40 +                |
| Improve Labor Productivity                   |             |             |                | 30                  |
| Schedule Effectively                         |             |             |                |                     |
| - People                                     |             |             |                | 20 40 40            |
| Create Safety Culture                        |             |             |                | 15                  |

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|---|-------------|-------------|---------------|--|
|   | Previous    | Current     | Filter Mode   |  |
| - Company Scorecard   |             |             |               | 90   |
| <ul> <li>Project Securement and Customer Satisfaction</li> <li>Grow Revenue/Margin from New Customers</li> </ul>  |             |             |               |  |
| Margin % from New Customers   | 7%          | 6.5%        | 7% 🧲          | 80   |
| Margin \$ from New Customers  | \$6,100,000 | \$6,500,000 | \$7,000,000 🧲 |  |
| Meetings with New Customers   | 5           | 8           | 10 🛆          | Dercent Dercent  |
| Proposals with New Customers  | 4           | 5           | 4 🥚           |  |
| Grow Revenue/Margin from Existing Customers   |             |             |               |  |
| Grow Revenue from New Services  Improve Customer Satisfaction   |             |             |               | 60-  |
| New Customer Satisfaction   | 82%         | 84%         | 90% 🧲         |  |
| Existing Customer Satisfaction  | 78%         | 75%         | 90% 🛆         |  |
| Operational Excellence  |             |             |               | Mar'06<br>Jun'06<br>Jun'06<br>Jun'06<br>Jun'06<br>Sep'06<br>Sep'06<br>Dec'06<br>Dec'06<br>Mar'07<br>Mar'07   |
| Improve Quality   |             |             |               | New — Existing   |
| Project Margin  | 6.7%        | 6.4%        | 0.07 🧲        |  |
| Warranty Cost   | 0.31%       | 0.3%        | 0.1% 🛆        | B   □   X ■ ■ × Z + Z +  |
| Customer Referrals  | 4           | 2           | 5 🛆           | A B C D 🔺  |
| Rework  | 0.6%        | 0.5%        | 0.2% 🛆        | 1 Complaint Categories   |
| Defect Counts   | 21          | 24          | 10 🥠          | Gount Quality 23   |
| Increase Estimating Accuracy<br>Reduce Waste in Procurement Process<br>Improve Labor Productivity<br>Schedule Effectively<br>People   |             |             |               | 5         People         4           6         Planning         7           7         Timeliness         10           8         Total         44           9         10         10 |

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#### Welcome, Bill Smith

| Projects S   | corecard                        |                          |              |          |  |  |
|--|---------------------------------|--------------------------|--------------|----------|--|--|
|  | Project Performance / Score     | ecard                    |              |          |  |  |
| Projects<br>Select a project<br>Project Name: Wilson (Contract Amount:<br>Project Number:<br>Design / Build:<br>Contract Start:<br>Construction Start:<br>Contract Finish:<br>% Contract Time Passed:<br>% Construct Passed: | Select a project Project 123    |                          |              |          |  |  |
|  |                                 |                          | Job Setup    | 100.0%   |  |  |
|  | Concrete Project<br>\$5,000,000 | <u>Buyout</u>            | 86.7%        |          |  |  |
|  | 2009.01<br>No                   | <u>Schedule</u>          | 78.3%        |          |  |  |
|  |                                 | <u>Budget</u>            | 75.0%        |          |  |  |
|  |                                 | 01/05/2012<br>01/05/2012 | Billings     | 60.5%    |  |  |
|  |                                 | 05/29/2012               | Production   | 100.0%   |  |  |
|  |                                 | 05/29/2012               | Submittals   | 85.0%    |  |  |
|  | 63.45%                          | <u>RFI's</u>             | 92.5%        |          |  |  |
|  |                                 | <u>Safety</u>            | 69.7%        |          |  |  |
|  |                                 |                          | Job Closeout | 100.0%   |  |  |
|  |                                 |                          | OVERALL      | <u> </u> |  |  |
|  |                                 |                          |              |          |  |  |



## Summary

- Know what you're trying to accomplish and why..
- Keep yourself accountable
- Move beyond traditional financial "rear view mirror" performance measurements



# **Thank You**

# Any questions?