Organization Strategies Today & Tomorrow

Session Moderator

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Solutions through Collaboration, Innovation

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Effectiveness of an Organization
(Ref: Charles Handy, Understanding Organizations)

- A system composed of

  The Individual
  - Ability
  - Motivation

  The Organization
  - Leadership
  - Systems/Structure
  - Group relations

  The Environment
  - Economic/Political
  - Technological
  - Physical

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Aim of ECC Session 3

- Input from the ECC community

  - On hiring, integrating, and retaining Individual Talent

  - On Organizational strategies

  - On responses to the current and future Environment

Methodology

- Survey over 70 individuals in E&C business
  - Senior Executives
  - Future leaders
  - Members < 5 years experience

- Aiming to get "Pulse" of Industry

- Over 20 follow-up interviews to mine Best Practices and nuances

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Session Participant

Rob Berra

Manager, EPC Contracting
ConocoPhillips

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Session Participant

Chip Andrews

Chairman
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The Individual

Attracting and Retaining the Best Talent

Upgraded Hiring and Integration

New College Grads- Gap Analysis

Training and Development as an Asset

Resources Crossing Over

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Upgraded Hiring and Integration

- Survey: *What is your company's rate of new hires?*

  - New hires in 2002 – 1 in 12

  - New hires in 2007 – 1 in 6

  - Projected new hires in 2012 – 1 in 5

Upgraded Hiring and Integration

- The opportunity

  - Develop "best in class" hiring

  - Employ improved employee integration techniques

  - Administer strong training programs

  Our opportunity to create a new and improved generation for our industry

Upgraded Hiring and Integration

- Solutions - Hiring

  - Commit senior management to the process

  - Aggressive use of co-op programs

  - Focus on leadership potential

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Upgraded Hiring and Integration

- Solutions – Integration

- Components of one program:

  - Structured training and development program for the first 5 years

  - Central training/training coordination function in place

  - Use of a "buddy system" for new hires

  - Formal approach to survey new employees' "temperature"

Upgraded Hiring and Integration

Safety Program Enhancement

- "Entrance Interview" for hires with experience

  - Two months after a new hire settles in

  - Ask about your firm's safety culture and practices

    - What surprised the new employee (good and bad)?

    - What were strengths of previous employer vs yours

    - What suggestions does the employee have?

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New College Graduates – Gap Analysis

- Survey: *What is the most likely reason for employees with 5 years or less experience to leave?*

  - Better growth opportunities in the future

  - Higher compensation

  - More responsibility immediately

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New College Graduates – Gap Analysis

- Survey Results

  - Largest gap – new college graduates vs. senior managers

    - Doesn't have the feeling of being on a winning team

    - Geography

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New College Graduates – Gap Analysis

- Survey: *How many of the 5 years or less experienced staff are likely to resign in the next 2 years?*

  - New college graduates:
    - 50% said you will lose more than 1 in 5
    - 15% said you will lose as high as 1 in 2

  - Senior managers:
    - 75% said less than 1 in 5
    - 25% said almost none

- Solutions

  - Better growth opportunities in the future and more responsibility immediately

    - Aggressive training and mentorship to prepare them

    - Push the envelope on upward mobility

New College Graduates – Gap Analysis

- Solutions

  - Higher compensation

    - Market-driven

  - Doesn't have the feeling of being on a winning team

    - Be a winning team

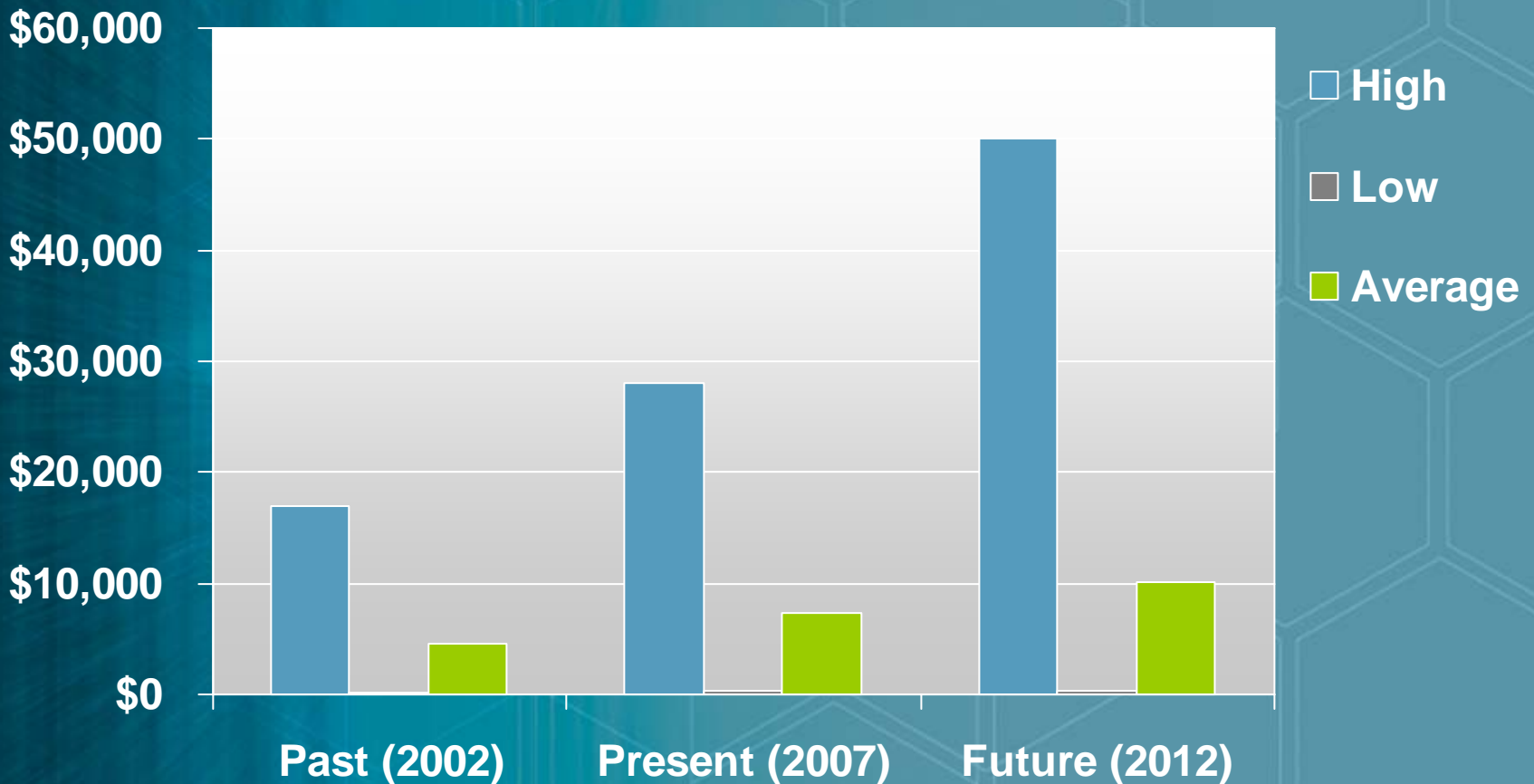   - Communicate, communicate, communicate

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Training and Development As an Asset

- Opportunities
  - Less experienced managers need proven skills and knowledge.
  - Documented competence, leveraged with training and development capabilities, accelerates learning.
  - Training and development creates a valuable recruiting tool.
  - Training and development creates a valuable retention tool.

Training and Development As an Asset

- Solutions
  - Increasing training and development budgets 100%, 300%, even 500% justified with substantial returns.
  - A culture of lifelong learning supports manager development.
  - Employing multiple delivery methods yields the best results.
  - Firm-wide documented competence is a big ancillary benefit.
  - Performance evaluations need personal development and successor development as key metrics.

Training and Development As an Asset

- Survey Responses
  - Average training budgets will double from 2002 to 2012.
  - Industry leaders in organizational development far exceed the average.
  - Is training and development a cost or an investment?
  - Overcome internal company cultural bias against substantial commitments to training.
  - Hire the best-of-class development resources.

Training and Development As an Asset

- **High Profile Training Elements**
  - Assessments and development prescriptions yield superior results.
  - New types of training are often required.
    - Technical
    - Project Management
    - Leadership
    - Financial
  - Commitment starts with senior executives.

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Two ARS Questions – Four Digit Answer

- Where is your company currently focusing its training and development budget?

  (Please rank from highest to lowest – ie. 4,2,1,3)

  1. **Technical**
     30%

  2. **Project Management**
     29%

  3. **Leadership**
     26%

  4. **Financial**
     15%

Two ARS Questions – Four Digit Answer

- Where do you think your company should spend its training budget?

(Please rank from highest to lowest – ie. 4,2,1,3)

1. Technical

25%

2. Project Management

29%

3. Leadership

32%

4. Financial

14%

Resources Crossing Over

Owner resources ⟷ Contractor resources

- What drives the switch?
  - Simple resource volume
  - Opportunistic employees
  - Strategic gain on new skill set

1. **Owner**

28%

2. **Contractor**

53%

3. **Supplier / Other**

10%

4. **Crossed over from Owner > Contractor**

3%

5. **Crossed over from Contractor > Owner**

0%

6%

The Organization

Organizational Practices

Lessons Learned in Real Time

Organizational Dynamics

Organizational impact of New Risk Profiles

Project Manager's Change in Skill Sets

Lessons Learned in Real Time

- Survey Results – Opportunities
  - Increasing number of new hires and new managers.
  - Increasing requirement for mentoring/coaching.
  - Increasing calls for technical expertise.
  - Increasing use of multiple geographies.
  - Increasing difficulty in successfully applying standard practices to every situation.

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Lessons Learned in Real Time

- **Solutions – Share Lessons Learned**
  - Harvest much more value from existing experience in the organization.
  - Build a global "community of practice" via web based discussion forums.
  - Identify subject matter experts.

Lessons Learned in Real Time

- Discussion Forums in Real Time
  - Examples:
    - European facility facing serious reliability issues with a vintage control system; recently changed out parts in a plant from the U.S. that were discovered to be available for their use; problem solved.
    - Mechanical plant in England needed a valve part with a 10-week delivery, forum provided immediately available part in U.S.

Lessons Learned in Real Time

- **Lessons Learned**
  - Opportunities
    - Avoid lessons learned gathering dust on a shelf or in a database.
    - Capture corporate knowledge in real time.
    - Use captured corporate knowledge as a development tool.

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Lessons Learned in Real Time

- **Lessons Learned**
  - One company's solution
    - Write up case studies (no names/divisions, make it generic).
    - Develop workshops for the case studies.
    - Have developmental teams solve the issues. They might find better solutions.
    - Document the case study lessons learned for corporate access.

Lessons Learned in Real Time

- **Lessons Learned**
  - Another company's solution
    - Have facilitators lead discussions on pertinent lessons learned with teams at key project meetings (basic engineering kickoff, detailed engineering kickoff, etc.) or teambuilding events.
    - Use a competitive team simulation environment to foster innovation and creativity to find the best currently available solution.
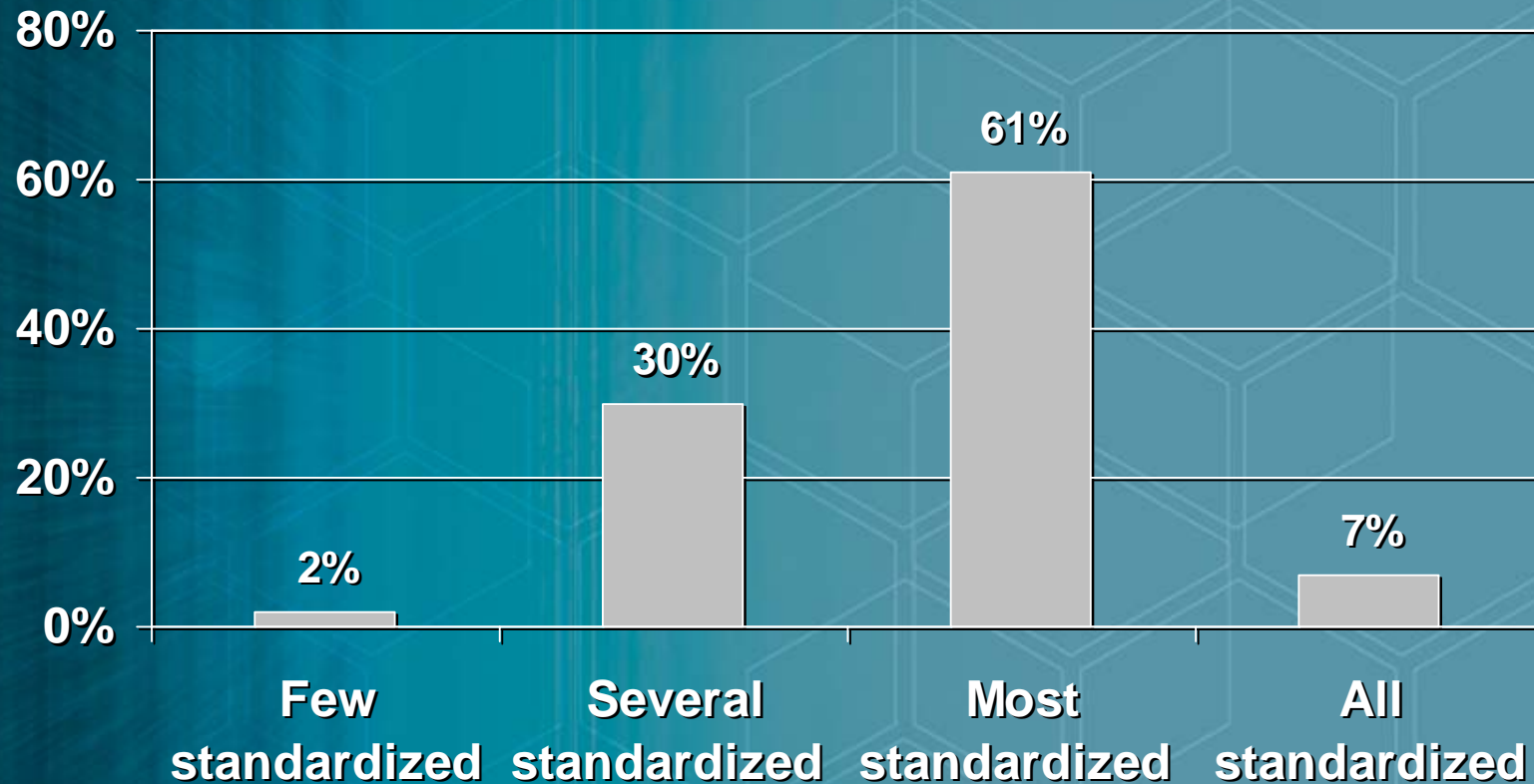
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Organizational Dynamics

SURVEY: *To what extent are business practices standardized at your company?*
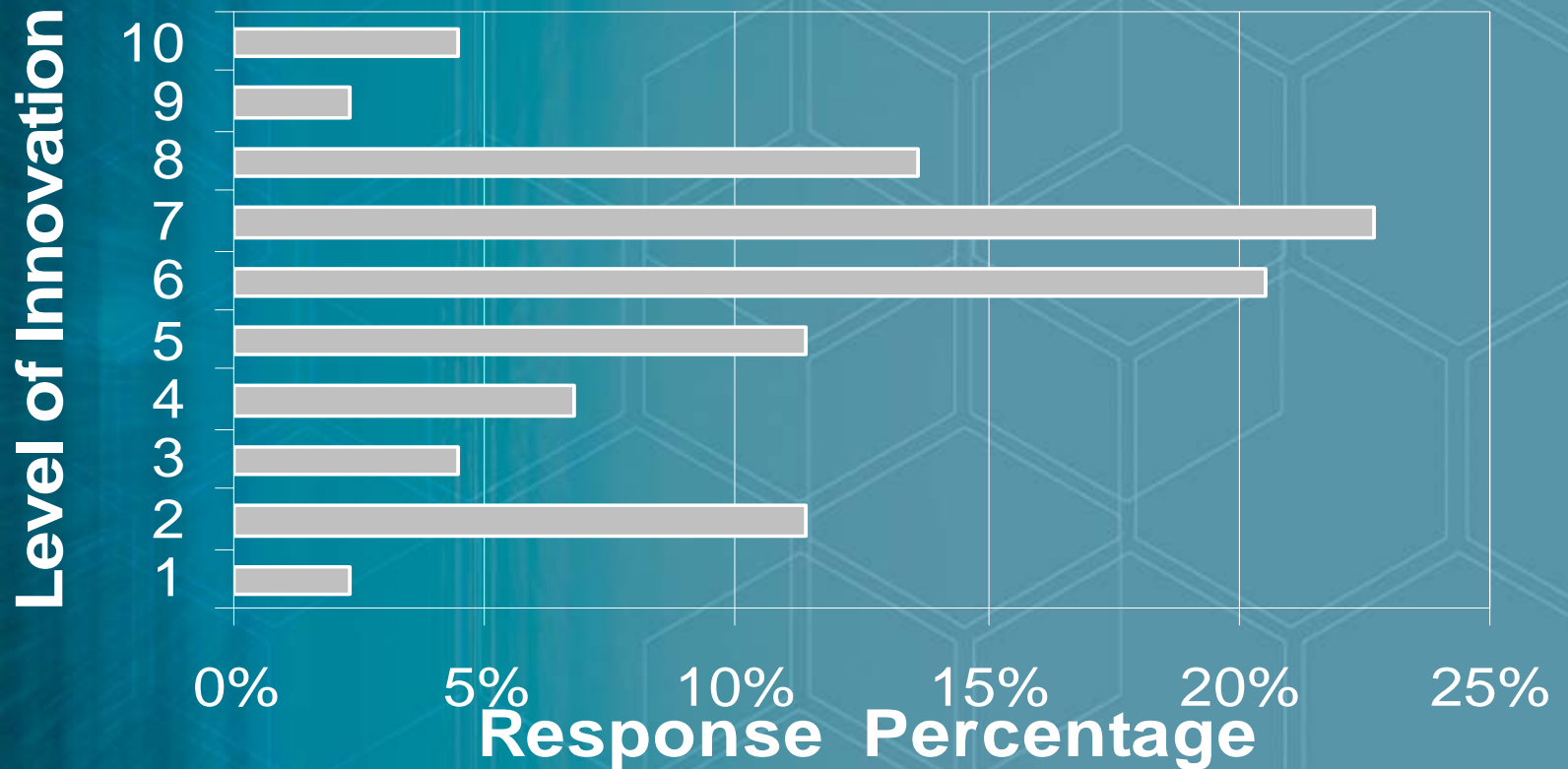
Organizational Dynamics

- Project organizational structure considerations
  - Centralized vs. decentralized
  - Static structure or continuously changing?
  - Resources - working within matrix organizations

- Project related governance
  - Accountability and 'ownership'

- Solutions
  - Increasing project size and volume may deserve centralized accountability

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Organizational Dynamics

SURVEY: *Level of innovation assigned to your firm's organizational staffing…*

Organizational Dynamics

Examples of Innovation:

BAA Terminal 5 Project:
   Organizational Behavior Management

ConocoPhillips Major Projects:
   Contractor Relationship Management

International EPC Contractor:
Market Awareness Committee
Risk Management Committee

Organizational impact of New Risk Profiles

- Contracting strategies generally trending away from fixed price, high risk

- Fewer industry personnel with recent lump sum experience

- Owner resource availability may be in conflict with project risk

- Need to balance applied resource skills and risk acceptance

- Contracting methods tied to available resources and accountabilities

Project Manager's Change in Skill Sets

- Survey: *What is the average number of direct reports per project manager in your company?*

    - Number of direct reports expected to double from 2002 to 2012

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Project Manager's Change in Skill Set

- The opportunity

  - Project managers must become less controlling

  - Project managers must create an internal collaborative atmosphere

Project Manager's Change in Skill Set

- Solutions

  - More "dashboard" type information available

    - Survey said 80% becoming more standardized

  - More "people skills" training

The Environment

Responding to the Current and Upcoming Environment

Increasing Project Size and Complexity

Increased Volume, and Pace of Change

Reinventing Retirement

Renewing the Management Team

Increasing Project Size and Complexity
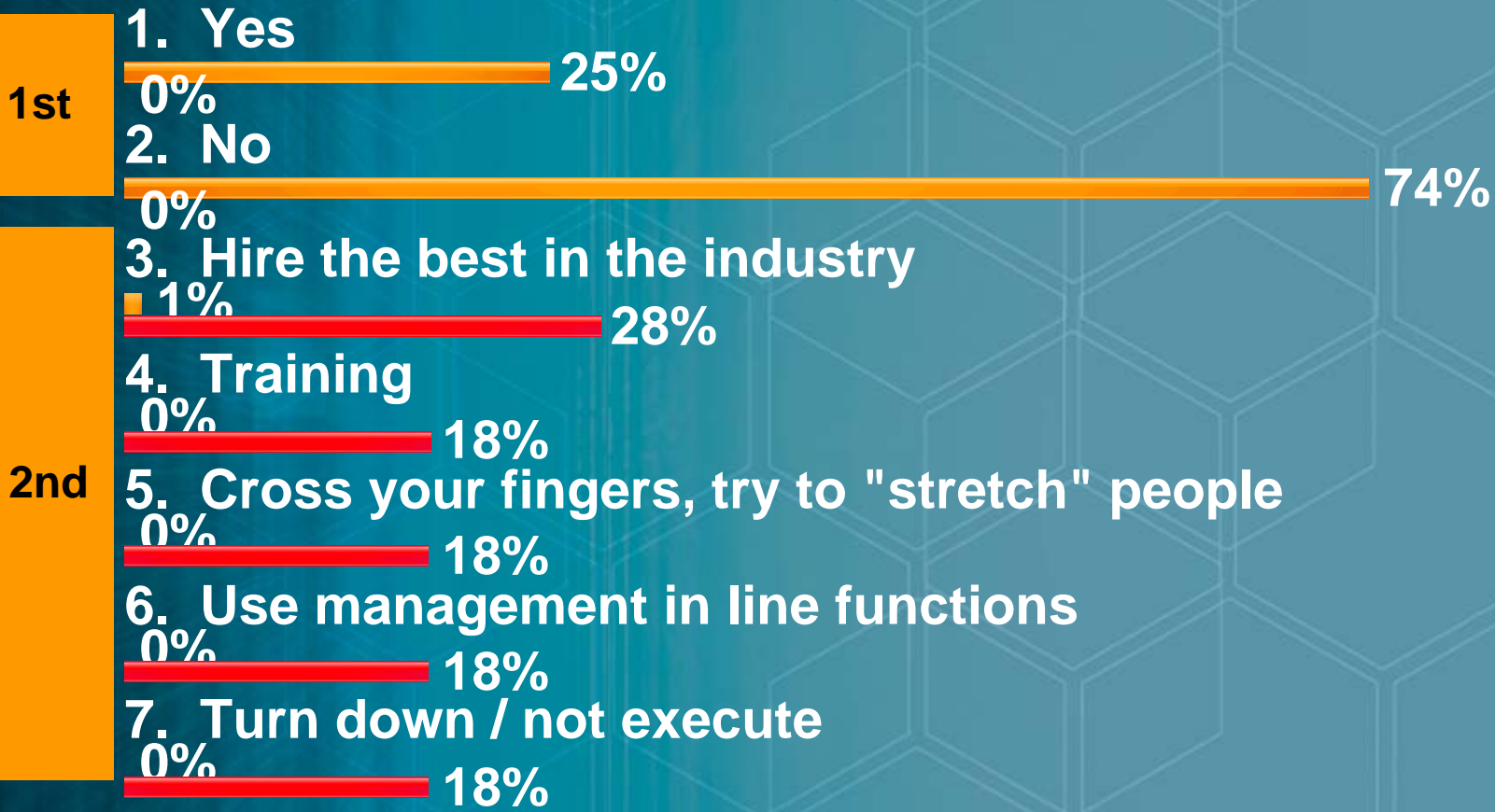
- Experiencing unique period in our industry

- Projects are different:
  - Larger
  - More complex
  - Riskier
  - More diverse
  - More challenged

- Yet, approaching with essentially the same resources and tool kit

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ARS Question – 2 digit answer

- (1st) Are you currently prepared for the size, complexities and volume of Mega Projects?

- (2nd) How are you going to become prepared?

1st

1. Yes

0% | 25%

2. No

0% | 74%

2nd

3. Hire the best in the industry

1% | 28%

4. Training

0% | 18%

5. Cross your fingers, try to "stretch" people

0% | 18%

6. Use management in line functions

0% | 18%

7. Turn down / not execute

0% | 18%

Increasing Project Size and Complexity

Mega-Project Managers

- What makes one?
- What are differences from a few years ago?
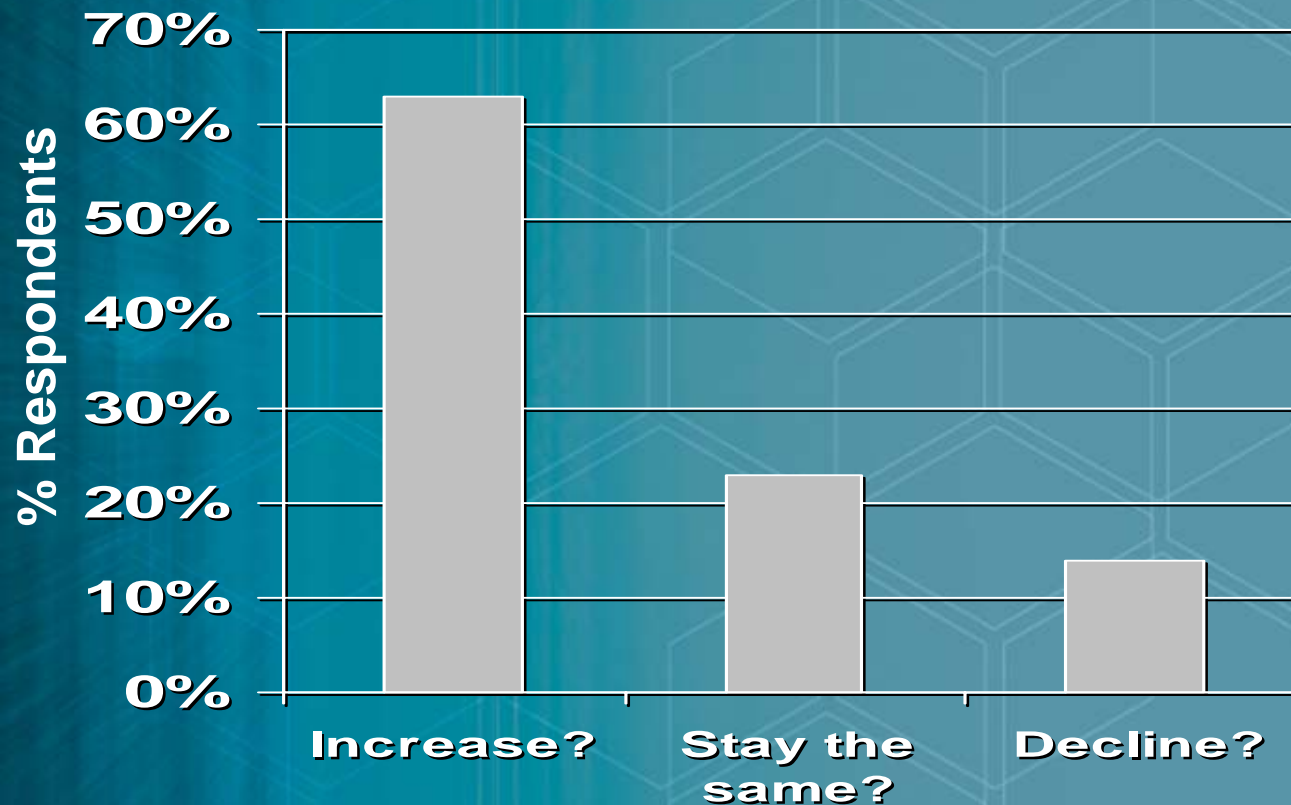- How develop new ones?
- How compare to previous "large" projects?

Increased Volume, and Pace of Change

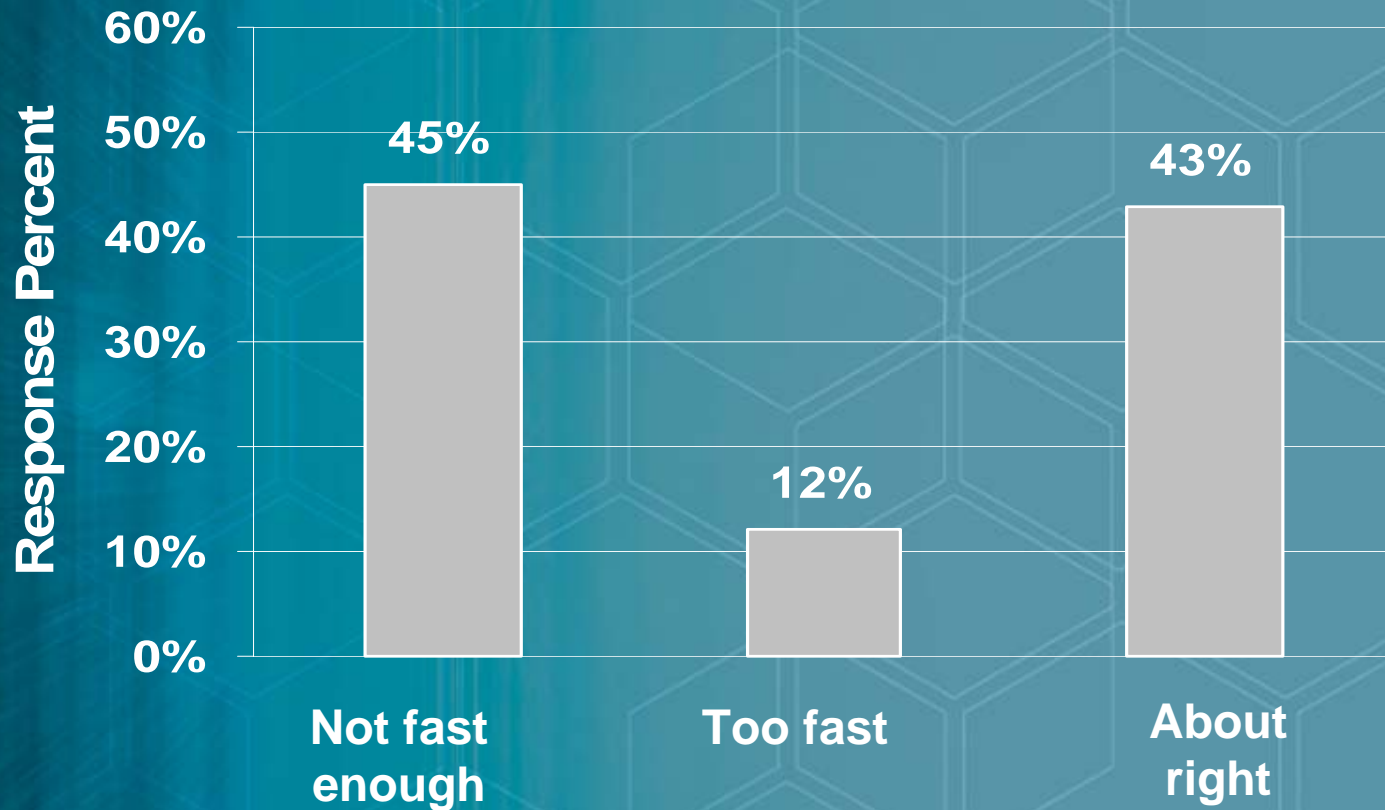**SURVEY:** *Five years from now (2012), do you expect your engineering and construction volume to…*

Increased Volume, and Pace of Change

- Is organizational change keeping pace with growth demand?

    - What are constraints on growth and change?
    - Where are constraints coming from?
        - Self imposed
        - Market

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Increased Volume, and Pace of Change

- Solutions: Factors that necessitate change

  - Market segment demands → competition
  - Growth
  - Risk
  - Skill sets
  - Strategies
  - Work processes

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Industry Consolidation

- Recent acquisitions

  <u>Announced</u>   <u>Completed</u>

  URS & WGI   WorleyParsons & Colt
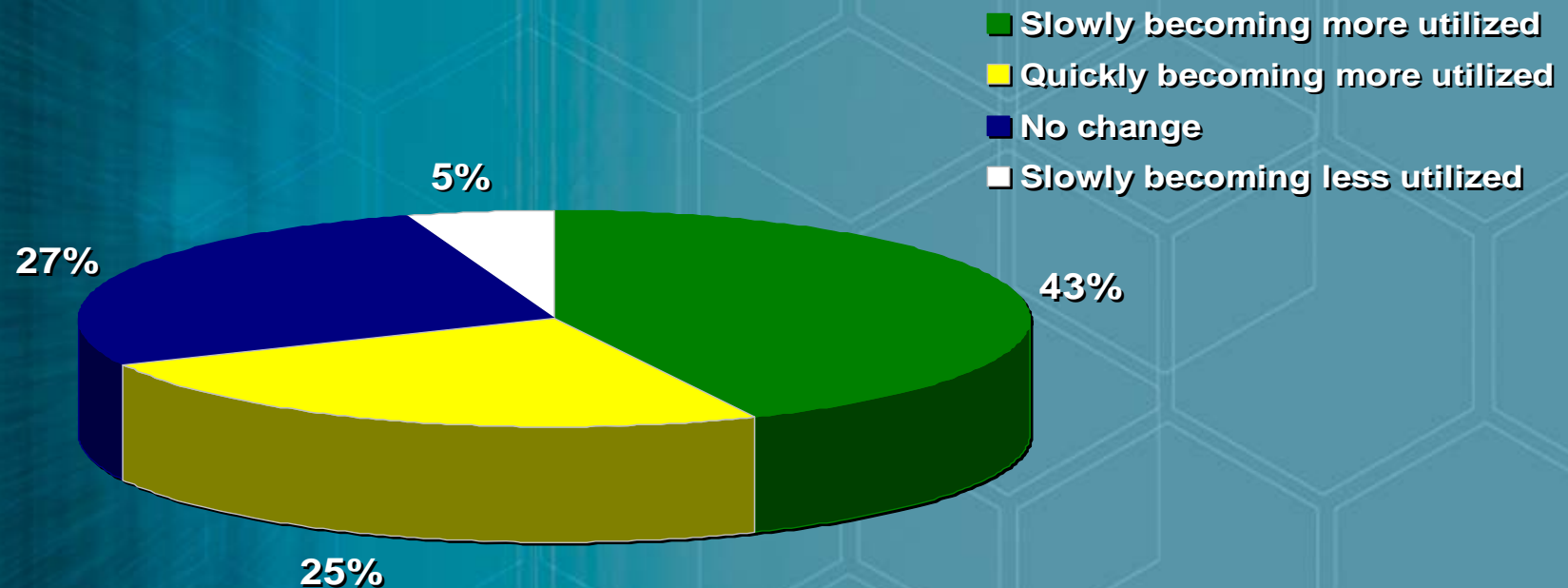
  CBI & ABB Lummus   CH2MHILL & VECO

- Strategically seeking more comprehensive services and larger breadth of resources

- Organizationally, each facing challenge of integration

- Good subject for next year!

Reinventing Retirement

Survey: *Please indicate how your company is utilizing retired professionals.*

Legend:
- ■ Slowly becoming more utilized
- ■ Quickly becoming more utilized
- ■ No change
- □ Slowly becoming less utilized

Pie chart values:
- 43%
- 25%
- 27%
- 5%

Reinventing Retirement

- The "Free Agents"
  - Opportunities
    - The 50-70+ year old "Free Agents" can be assets not yet depreciated.
    - They are a big part of the industry's collective wisdom.
    - Many are retirement eligible, but still want to be in the game.
    - Most companies allow or even encourage valuable human assets to walk out the door.

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Reinventing Retirement

- The "Free Agents"
  - Solutions
    - Aggressively recruit "Free Agents" inside the company.
    - Aggressively recruit "Free Agents" in the industry.
    - Consider "knowledge workers" as their predominant roles.
    - Embrace high levels of individual flexibility to meet personal agendas in roles and schedules.

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ARS Question – Single Digit Answer

- If your company put a full court press on recruiting "Free Agents," how many more average productive employment years could be achieved?

1. **<2 years**

   7%

2. **2-3 years**

   10%

3. **3-4 years**

   17%

4. **4-5 years**

   26%

5. **>5 years**

   40%

Driver for Renewing the Management Team

- Survey: *What % of the management team will be replaced in the next 5 years?*

  - Normal replacement over 5 years – approximately 12%

  - 80% said the next five years will actually be approximately 30%

  - Half of you said the number would be closer to 50%

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Driver for Renewing the Management Team

- The opportunity

  - Retain the knowledge

  - Retain the people

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Driver for Renewing the Management Team

- Solutions

  - Formal program for downloading retirees' experience

  - Web-based data bases, identifying retired "subject matter experts"

  - Retaining "experienced" people longer through:

    - Flexible work hours
    - Telecommuting

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Driver for Renewing the Management Team

- The opportunity

  - Replace senior/general management

  - Replace experienced project management personnel

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Driver for Renewing the Management Team

- The solution

  - Prepare remaining project managers for more responsibility

  - Aggressively develop the next level of management

ARS Question – 3 digit answer

- (1st) Does your company have a formal "high potential employee program"?
- (2nd) Is it valuable and achieving desired results?
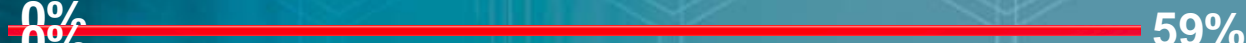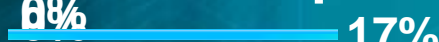- (3rd) What is largest constraint on the program?

1st

1. Yes
0% 0% 47%
2. No
0% 12% 53%

2nd

3. Yes
0% 0% 59%
4. No
0% 0% 28%

3rd

5. Budget
0% 16%
6. Too busy
0% 55%
7. Poor results
0% 12%
8. Loss of personnel after training
0% 17%

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Renewing the Management Team

- The solution

   "High Potential Programs"

   - Start or upgrade your company's high-potential program

   - Opportunities to develop and advance will be greater due to replacement needs

   - Drives better focus

   - One size may not fit all

   - Someone has to be engineering and constructing the next management team

Renewing the Management Team

- Should you really put a lot of energy into people development?