



**United
Technologies**



Development of An Assessment
Center for Program Managers

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UTC Products



Pratt & Whitney



OTIS



Carrier



Sikorsky



Hamilton Sundstrand



International Fuel Cells

Structure



- United Technologies Corporate Division
 - Learning and Development Organization –
a shared services provider
 - Provides leadership, management and technical education and development common to all divisions

Business Case for Program Management Assessment



- In 2002 the corporation began a strategic initiative to improve enterprise productivity
 - In particular the effectiveness of technical programs
 - 2 primary opportunities
 - Systems Management
 - Program and Project Management

Making the Case for Assessment

- Evaluations of the past 3 years of leadership assessment indicate:
 - 99% of participants find the programs highly effective.
 - The average reported return on the \$5,000 cost of assessment is \$100,000 within 9 months.
 - Assessment technology is transferable to project management

Sponsorship

- Technical Council and Quality Council jointly responsible for improved quality of program and project management
- Received sponsorship from Councils for the development of UTC Program/Project Manager Competency Model & Development Center for
 - Development
 - Selection
 - Performance Management

Challenges



- The great debate
 - Is it project or program management?

More challenges



- Are the competencies the same
 - in aerospace projects and commercial manufacturing projects
 - in military aerospace projects and commercial aerospace projects
 - In IT projects and other non-technical projects

And more challenges



- Compatibility with the UTC Leadership Competency Model
- Compatible with UTC project management curriculum (present and future)

Finding a Partner



- Cambria Consulting
 - Experience with project management competency models
 - CML 1990

Defining “Competencies”

Personal Competencies

Analytical Thinking

Self-confidence

Decisiveness



Behavioral Competencies

Program Leadership

Planning and Organizing

Business Judgment

Knowledge and Skill

Technical/Functional Acumen

Project Management Body of Knowledge

Instrumental Skills/Tools

Critical Incident Interviews

- 16 interviews conducted with program/project managers representing each UTC business
- Topics covered:
 - Current job responsibilities
 - Major challenges in the role
 - Key events in the life of selected programs
 - Business/technical/personal competencies needed for success
 - Best/most valuable development experiences

Behavioral Competencies



- Program Leadership
- Organizational Influence
- High-performing Team Leadership
- Partnering
- Driving Ownership and Accountability
- Creative Problem-solving
- Business Judgment
- Planning and Organizing
- Program Execution and Risk Management

Example of a Behavioral Competency



- **High-performing Team Leadership**
 - Keeps people motivated and focused throughout the program, especially during times of challenge, adversity, or slowdowns
 - Creates a team climate where people are encouraged to take prudent risks and where occasional mistakes are accepted, provided people learn from them
 - Delegates significant authority and responsibility to core team members
 - Accurately assesses peoples' strengths, limitations and technical/functional capabilities and matches them effectively to program assignments

Personal Competencies



- Technical/Functional Acumen
- Analytical Thinking
- System Thinking
- Self-confidence
- Decisiveness
- Persistence
- Interpersonal Astuteness
- Communication Skills
- Adaptability

Example of a Personal Competency

- **System Thinking**

- Identifies the most important priorities in the context of all the technical, financial, schedule, organizational, political, people and customer issues that exist at any given time
- Sets priorities on problem-solving (e.g., solutions that solve multiple problems) based on understanding the entire system and its interdependencies
- Is able to cognitively manage the complexity of details about the program and the people working on it, without getting bogged down in the details
- Understands how the component projects affect and fit in with each other in a complex program

Ranking Behavioral Competencies

- Program Leadership
- High-performing Team Leadership
- Program Execution and Risk Management
- Driving Ownership and Accountability
- Business Judgment
- Planning and Organizing
- Creative Problem-solving
- Organizational Influence
- Partnering

Ranked
Importance

1

2

3

4

5*

5*

7

8

9

Ranking Personal Competencies

- System Thinking
- Decisiveness
- Communication Skills
- Persistence
- Analytical Thinking
- Self-confidence
- Adaptability
- Interpersonal Astuteness
- Technical/Functional Acumen

Ranked Importance as Attributes	Weighted by Importance to Behaviors
1	7*
2	1
3	7*
4	5
5*	4
5*	7*
7	9
8	3
9	2

Assessment Challenges

- Complexity of job requires a sequenced approach over time
 - Scope, complexity, and time span issues
- Different businesses require different contextual knowledge
 - In-baskets/simulations designed to business content

What Criteria Should We Use?



- Personal Competencies
 - Selection
 - Early identification of talent
 - Promotion (e.g., to project manager)
- Behavioral Competencies
 - Performance management
 - Development in-place
 - Bench strength assessment
 - 360 feedback

Assessment Sequence



- Identify high-potentials
 - Assess on personal competencies; select on least-developable ones
- Develop in project manager assignments
 - In same or different businesses?
- Assess for selection/development into program manager jobs
 - Behavioral competencies

Development Center Design



- Criteria
 - Combination of assessment and development coaching
 - Staffed by recognized program management experts
 - Expense in range with the existing development centers