

**Business Continuity
Part 2
Converting Risk Assessments to
Risk Mitigation Activities to
Business Recovery Plans**

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Corporate Business Principles

Intel strives to prevent injury to employees, guests and neighbors; protect Intel's assets from damage or loss; and minimize the effects of any incident so that they do not compromise Intel's ability to achieve its mission. Intel recognizes that a wide variety of disasters (natural and human-caused) or failures (physical and information systems) can occur. Although these incidents cannot always be avoided even where preventative measures have been taken, through effective planning we can reduce both the duration and severity of any event that does occur.

To accomplish our goals of preventing injury, protecting assets, and minimizing the impact of any incident, Intel operations incorporate Business Continuity as a core business practice. Business Continuity is an integral approach to doing business that promotes safety as a core value while providing reasonable assurance we can respond to emergencies and keep our core business running during times of unexpected events or disasters.



Examples of Threat Categories

- **Natural Disasters**
- **People Issues**
- **Major on-site issues**
- **Major off-site issues**
- **Product**
- **Computing Infrastructure**
- **Suppliers**
- **Customers**
- **Governments**
- **Partners/Allies**



Examples of Impact Categories

- **People**
- **Computing**
- **Physical**
- **Logistic**
- **Financial**
- **Customer**
- **Legal**
- **Indirect**



Top Level Support

COO, CEO and CFO support in place

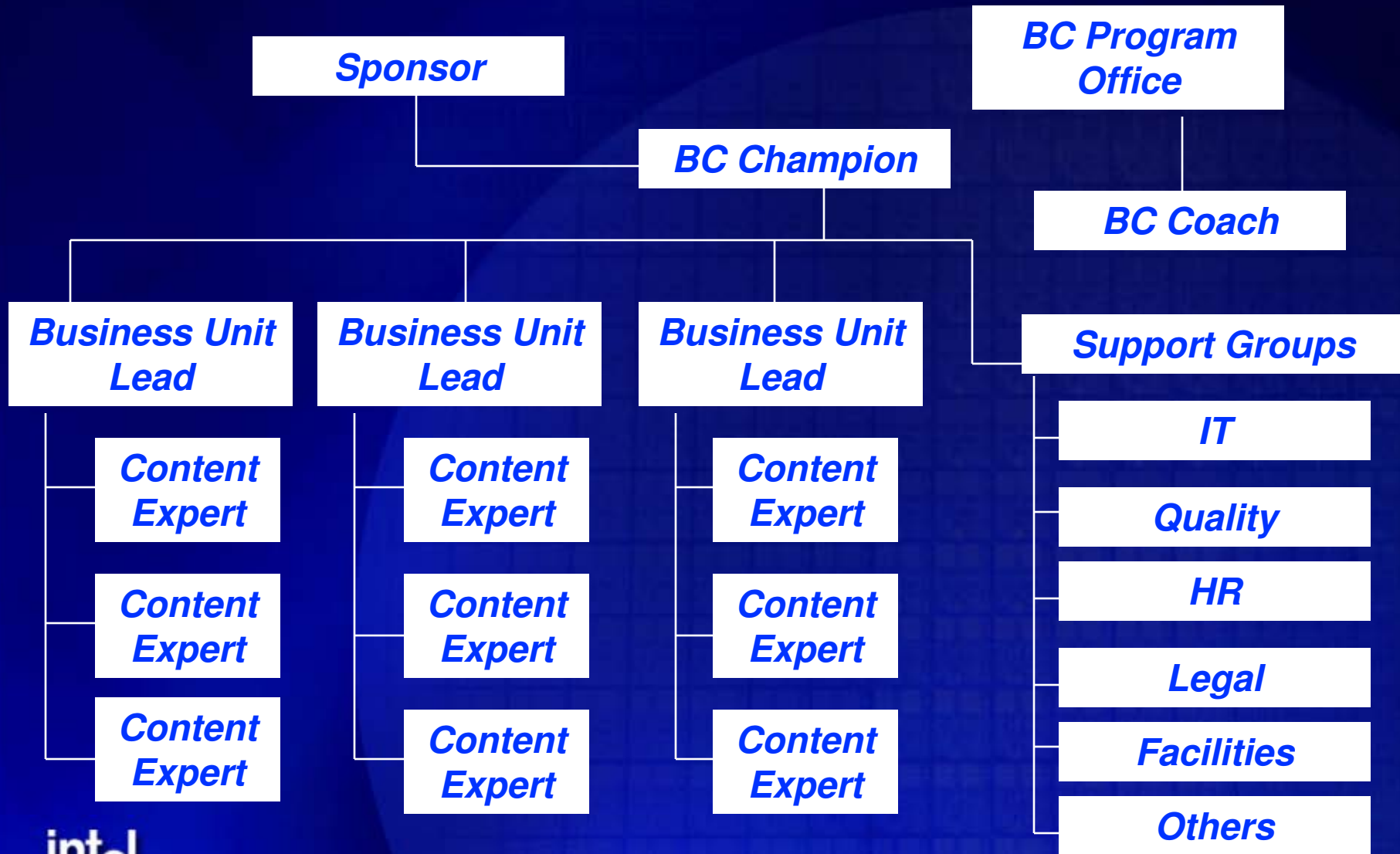
- Need to ensure all areas were considered
 - Employees
 - Customers
 - Stockholders
 - Investment community
- Every Intel organization must make Business Continuity a core business practice
- Quantify, where possible, the loss impact from both a business interruption (number of days) and a financial standpoint (dollars).
- A sum of money was set aside for immediate upgrades to vulnerable areas
- Use funds rapidly and wisely as they may be withdrawn
- Additional funding to come from business with needs

Top Level Support

Safety and Security Initiative

- Senior VP with ability to call on any Business Unit if needed
 - Physical Security including employee access
 - Communication
 - Safety and Security Task Force (SSTF) Core competencies
 - Business Continuity Program Office (BCPO)
 - Keep the message consistent and programs on time line
- BCPO Management
 - Sr Manager, 3 BC Coaches, 1 webmaster, 1 Comms Manager, 1 Support / Course Dev
 - Create toolkits, presentations, common methods, common reporting
 - Coaches took the message through out the Business units
 - Every Intel organization must make Business Continuity a core business practice
 - Quantify, where possible, the loss impact from both a business interruption (number of days) and a financial standpoint (dollars).
- Run the process in less than 12 months to sustaining

Project Organization Model



Key BC Questions:

Is your organization ready....

Could your organization answer these questions?

- Do you understand your core business vulnerabilities or potential failure points during a major extended crisis?
- Do you have emergency management structures and defined roles & responsibilities in place to respond to a crisis?
- Do you know your key support groups and suppliers BC plans? Are your plans in alignment so you would be able to continue operations?
- Do you know how to contact key individuals required to respond to the crisis in your organization through a variety of channels including non-working hours?

BC Planning Process

**Respond to
Disasters
as Needed**

Analyze Risk

- Identify Risks
- Determine Impact
- Develop Risk Mitigation Strategies
- Determine Areas needing BC plans

Test Response

- Conduct Drills & Exercises
- Conduct Self-Assessment

Prepare Response

- Mitigate Risks
- Prepare Plans
 - Business Recovery
 - Emergency Response

Risk Analysis and Mitigation Planning

BC Planning Process

Identify Risks
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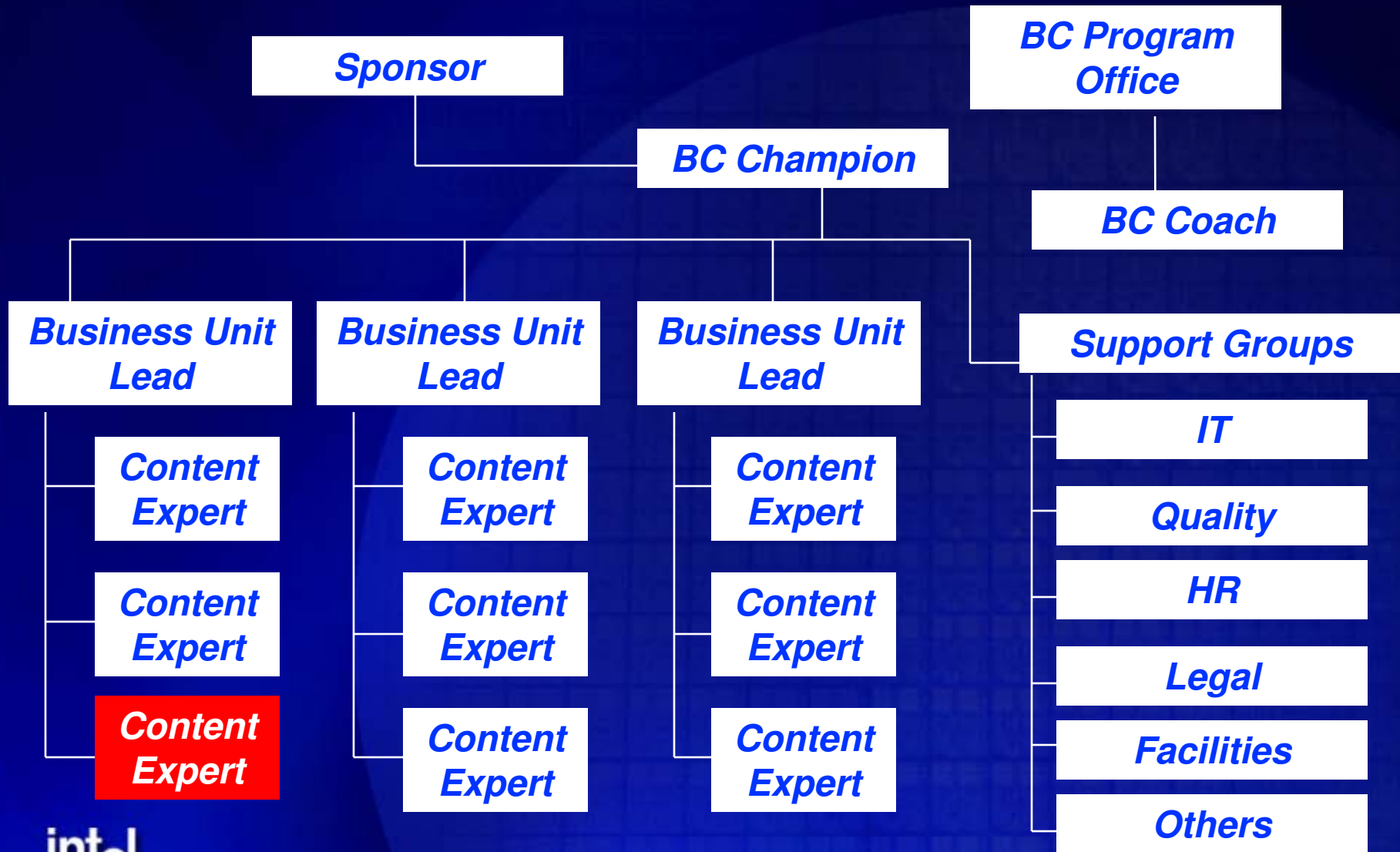
Risk & Impact Assessment: Getting Started

- Pick a format
- Make it universal for the group
- Ensure that you can 'roll up the data'
- **Basic Information:**
 - Organization
 - Owner
 - Date and Revision Number
 - Approving Body and Approval Date
- **Core Business Function**
 - Typically 3-5 May be more or less
- **Supporting Business Processes**
 - Typically 3-5 May be more or less

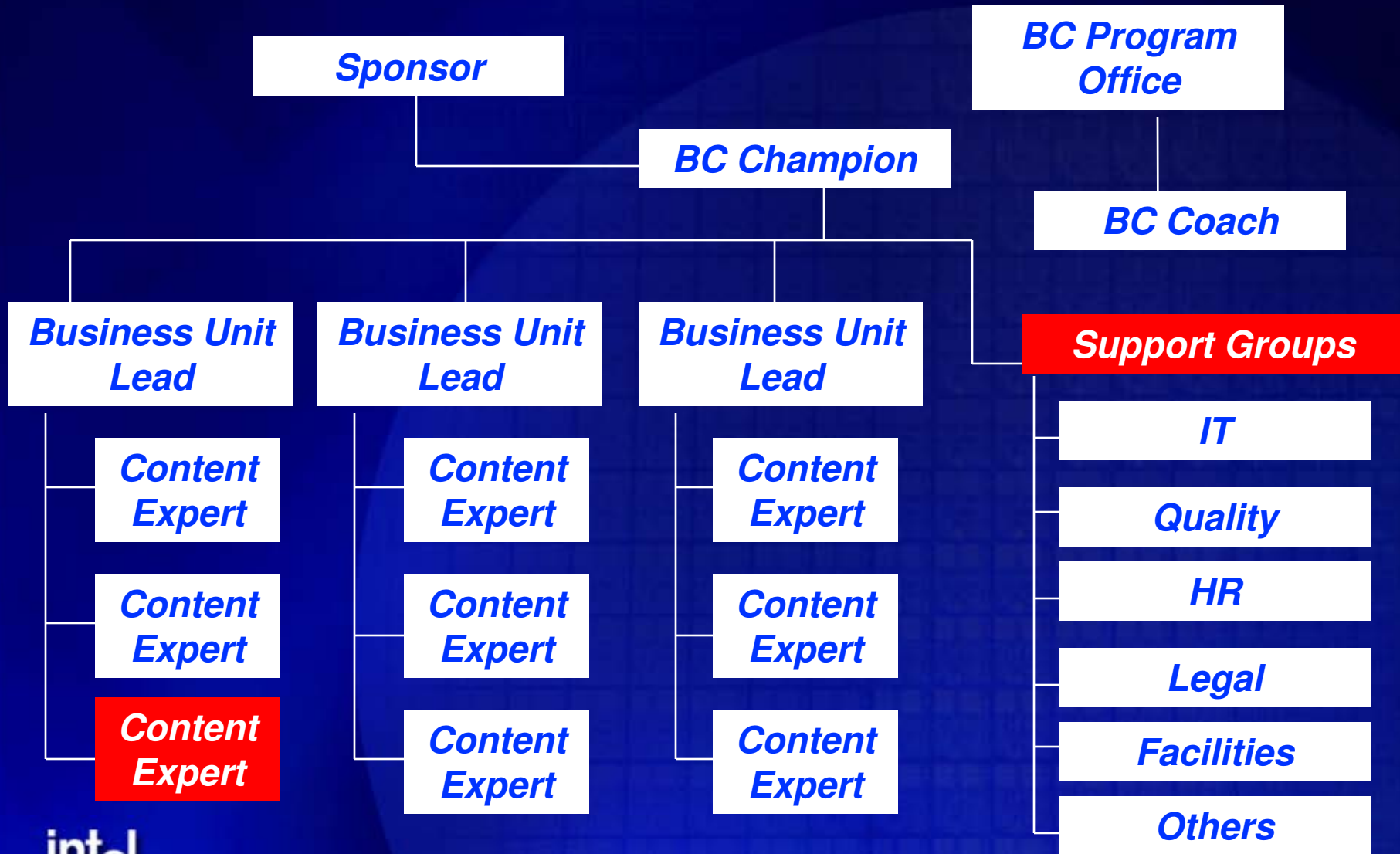
Risk & Impact Assessment

- For each Supporting Business Function indicate:
 - Critical Links with other organizations
 - In place Controls
 - Are the current Controls Effective
 - Impacts / Failures and Single Points of Failure [SPoF]
 - Impact Severity – H/M/L – Models uses 3 could be 5 or 10
 - Likelihood of Occurrence – H/M/L - Model Uses 3
 - Mitigation Required / Desired
- Complete for each Business Function
- Validate assumptions with Support Groups
- Subject Matter Expert / Content Expert has Worksheet reviewed and agreed to by management
- Peer Reviews

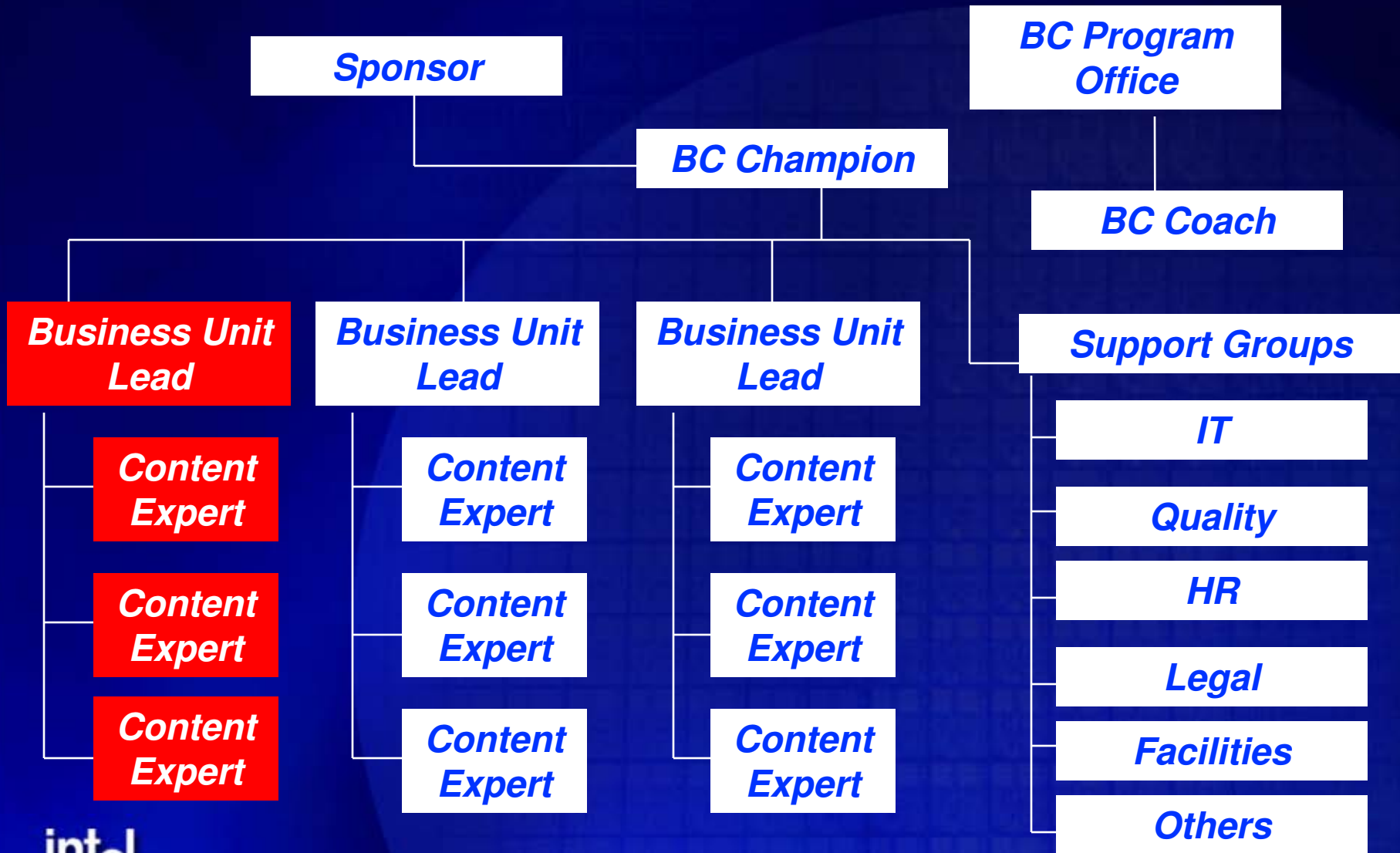
Project Organization Model



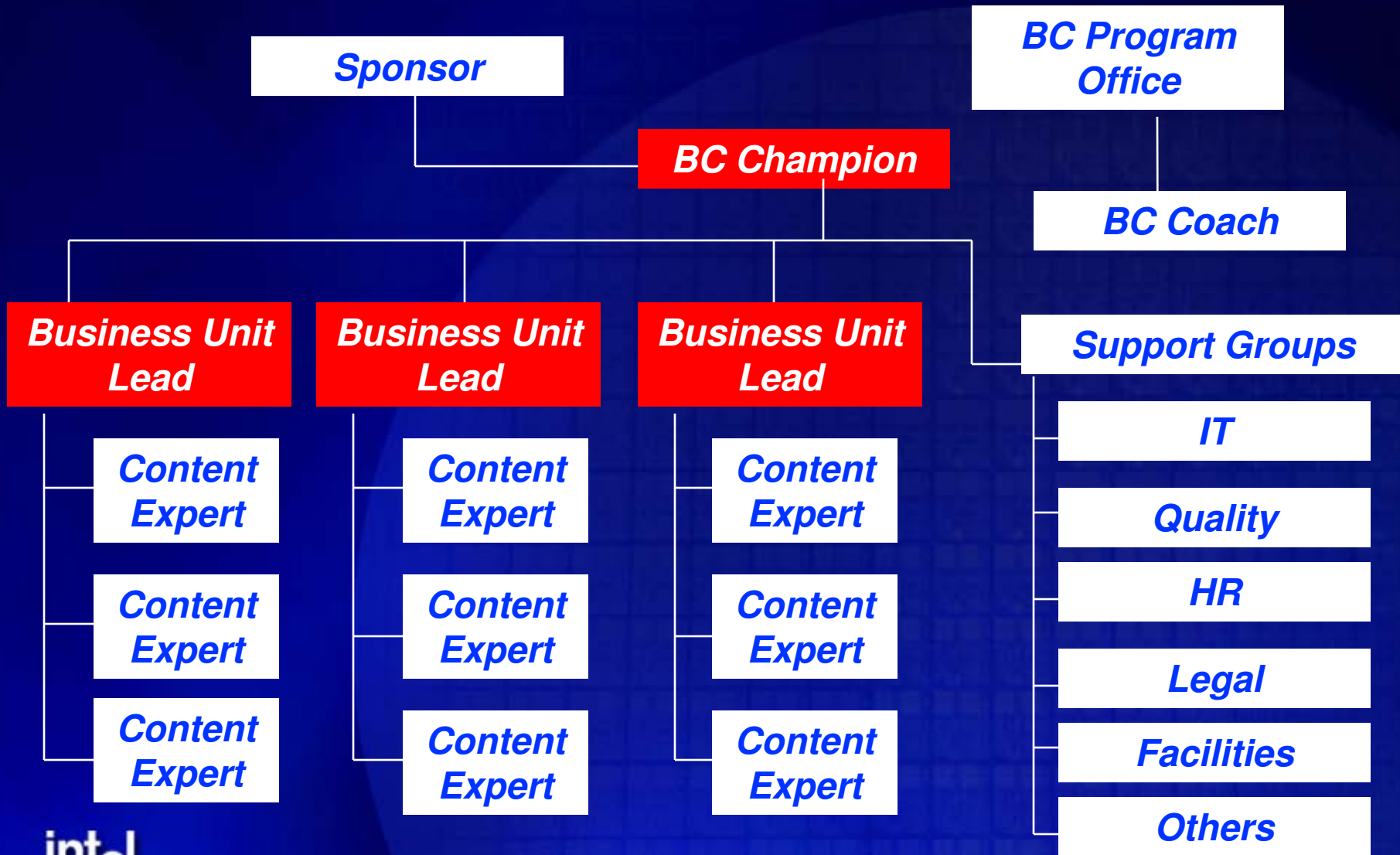
Project Organization Model



Project Organization Model



Project Organization Model



Risk & Impact Assessment

- Business Unit Lead:
 - Conducts Peer reviews
 - Look for commonality of issues
 - Assist in Prioritizing mitigation efforts
 - Obtain Business unit Management 'buy-in'
- Re - validate assumptions with Support Groups
- Business Unit Peer reviews
 - Reviews conducted by BC Champion
 - Look for commonality of issues
 - Assist in Prioritizing mitigation efforts
 - Obtain Business unit Management 'buy-in'
- Report out prepared
- Recommended mitigation efforts presented
- Formalize plan creation

Develop Risk Mitigation Strategies

- Based on the risk analysis, determine which actions provide the best cost-benefit ratio with regards to risk reduction.
- Examples of Risk Mitigation Include:
 - Building backup or redundant information systems
 - Moving to lower risk manufacturing locations and logistics channels
 - Duplicating IP (designs, source code, etc.)
 - Pre-qualifying alternate suppliers
 - Distributing unique or critical path manufacturing processes to multiple sites

Risk Assessment Outcome Chart

	<i>Low</i>	<i>Medium</i>	<i>High</i>	
<i>Severity</i>			1.6	<i>High</i>
	1.4	1.1		<i>Medium</i>
	1.3	1.5	1.2	<i>Low</i>

Risk Assessment Outcome Goal



Mitigate Risks Emergency Response and Disaster Recovery Plans

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Develop Disaster Recovery Plans

- Based on the Risk Mitigation Actions, determine the extent to which critical functions need to be covered in Disaster Recovery Plans (DRP).
- The DRP is the **process** of developing **advance** arrangements and procedures that enable an organization to **respond** to a disaster and **resume** the critical business functions within a predetermined period of time, **minimize** the amount of loss, and repair or replace the damaged facilities as soon as possible*

* *Disaster Recovery Institute*

Disaster Recovery



Business Recovery Plan

– Overview

- Plan Author(s) and Preparing Organization
- Recovery Strategy
- Recovery Plan Scope
- Plan Objectives
- Recovery Team Contact Lists
- Recovery Team Roles and Responsibilities
- Recovery Team Location
- Communication Channels

– Business Recovery Trigger Points

- Recovery Time Objective (RTO) Requirements
- Recovery Plan Authorization & Activation Triggers

Business Recovery Plan

– Critical Recovery Information

- Business Recovery Plan Checklist
- Business Recovery Priorities
- Job Descriptions
- Travel Coordination
- Offsite Storage Information
- Keys, Electronic Codes and Passwords
- Vendors/Suppliers

– Business Recovery Procedures

- Recovery Procedures
- Recovery Procedures for Group/Function/Process

Business Recovery Plan

- Restoring Functional / Normal Operations
 - Criteria for Returning to Functional / Normal Operations
 - Normal Operations Startup
 - Post-Mortem Event
- Plan Maintenance Procedures
 - Plan Review and Update Process
 - Business Recovery Plan Distribution Procedures
 - Revision History

Business Recovery Plan

- Trigger points
 - Helps determine the appropriate response for different events
- Recovery time goals
 - Will help drive prioritization of activities
- Critical Information
 - Checklists for crisis teams
 - Priorities for recovery sequences
 - Information storage – where can critical data and information be found.
 - Documentation, resource lists
- Recovery Procedures
 - Criteria for returning to normal operations

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Respond to Disasters as Needed

Drills, Exercises and Self-Assessment

- An untested plan is only paper
 - Multiple types of tests and exercises
 - Should include first line and secondary players
 - The more you test the better the response
 - Conduct after action or post mortem report
 - Assign action items and follow up through closure
 - Update plans and redistribute
 - Prepare management report on activities
- Self-Assessment
 - Common questionnaire to be completed by representatives from each group
 - Provides benchmark for further improvement

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Respond to Disasters as Needed

Business Continuity: Summary

- Assess Risks and drive Risk Mitigation Activities
- Ensure Readiness
 - Drive Disaster Recovery Plan creation/updates
 - Coordinate with supporting organizations and internal customers
 - Coordinate with external suppliers of materials and services
- Test Readiness
 - Conduct drills/testing of plans

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