



CMMI® Training – Avoiding Waste and Ineffectiveness

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Defense, Space & Security

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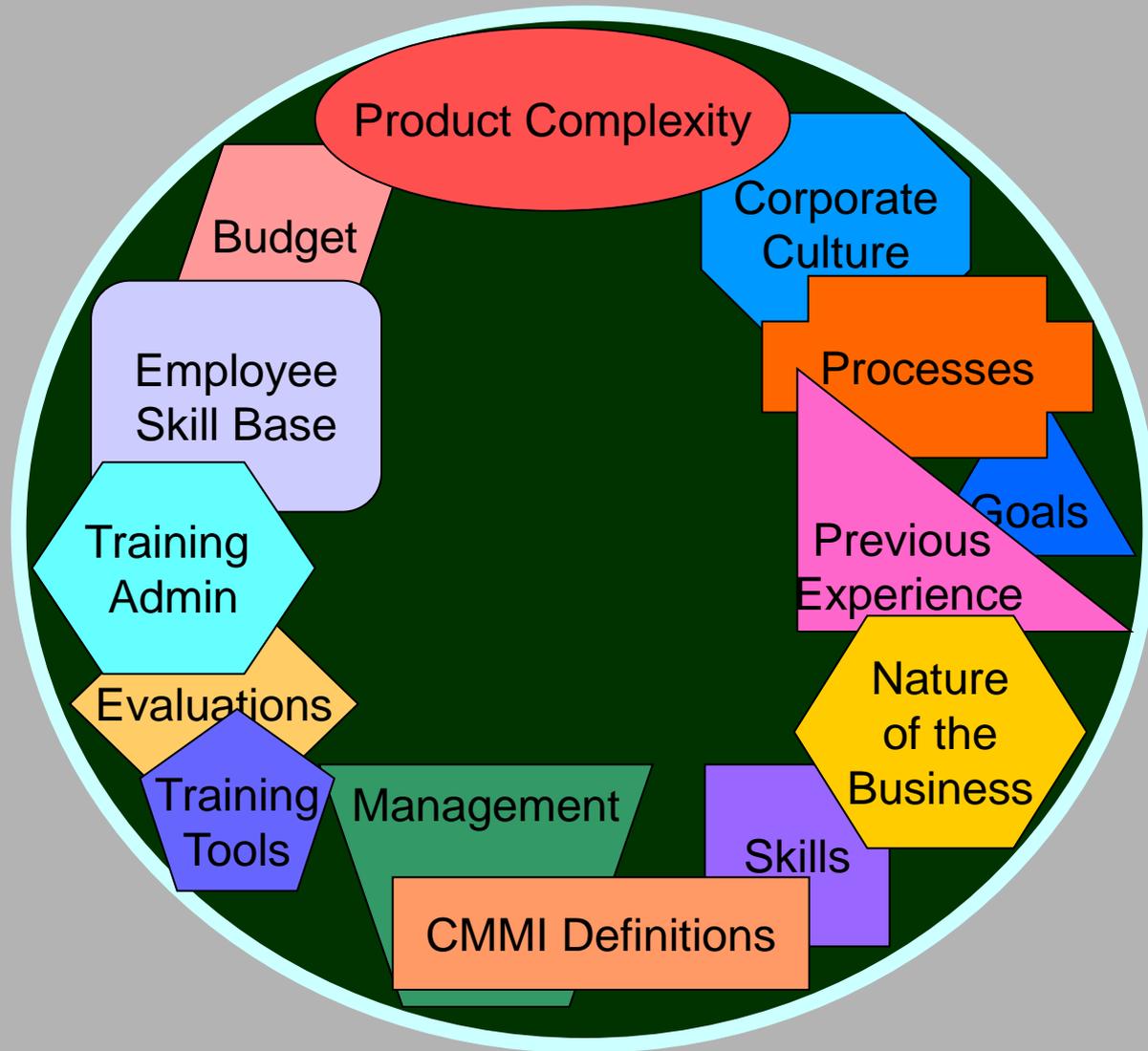
Mobility - Philadelphia

November 17, 2011

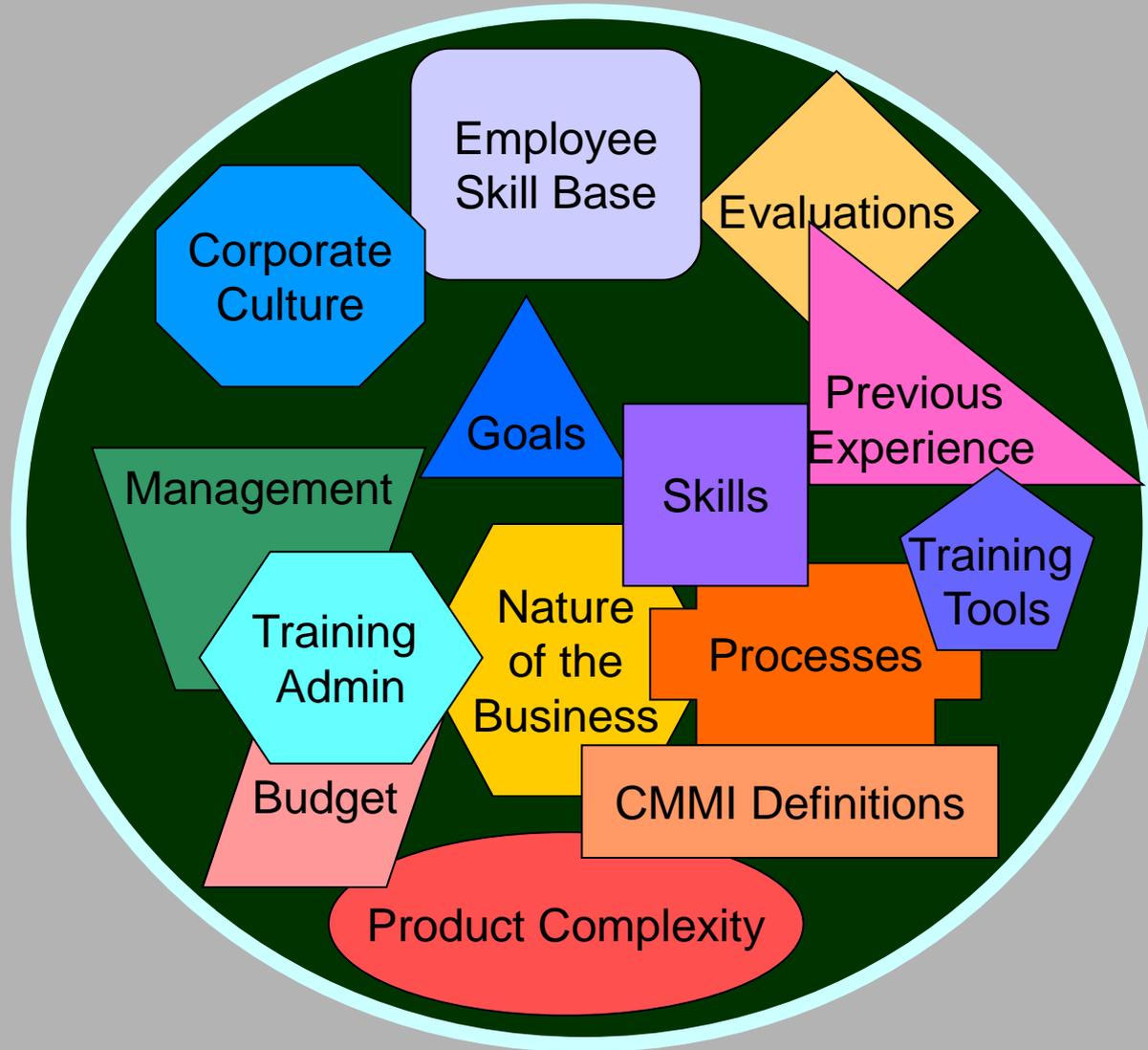
CMMI® Training – Opportunities or Pitfalls?

- **Budget**
- **CMMI Definitions**
- **Corporate culture**
- **Evaluations**
- **Employee skill base**
- **Goals**
- **Management**
- **Nature of the business**
- **Previous experience**
- **Product complexity**
- **Processes**
- **Roles**
- **Skills**
- **Training Tools**
- **Training administration**
- **etc**

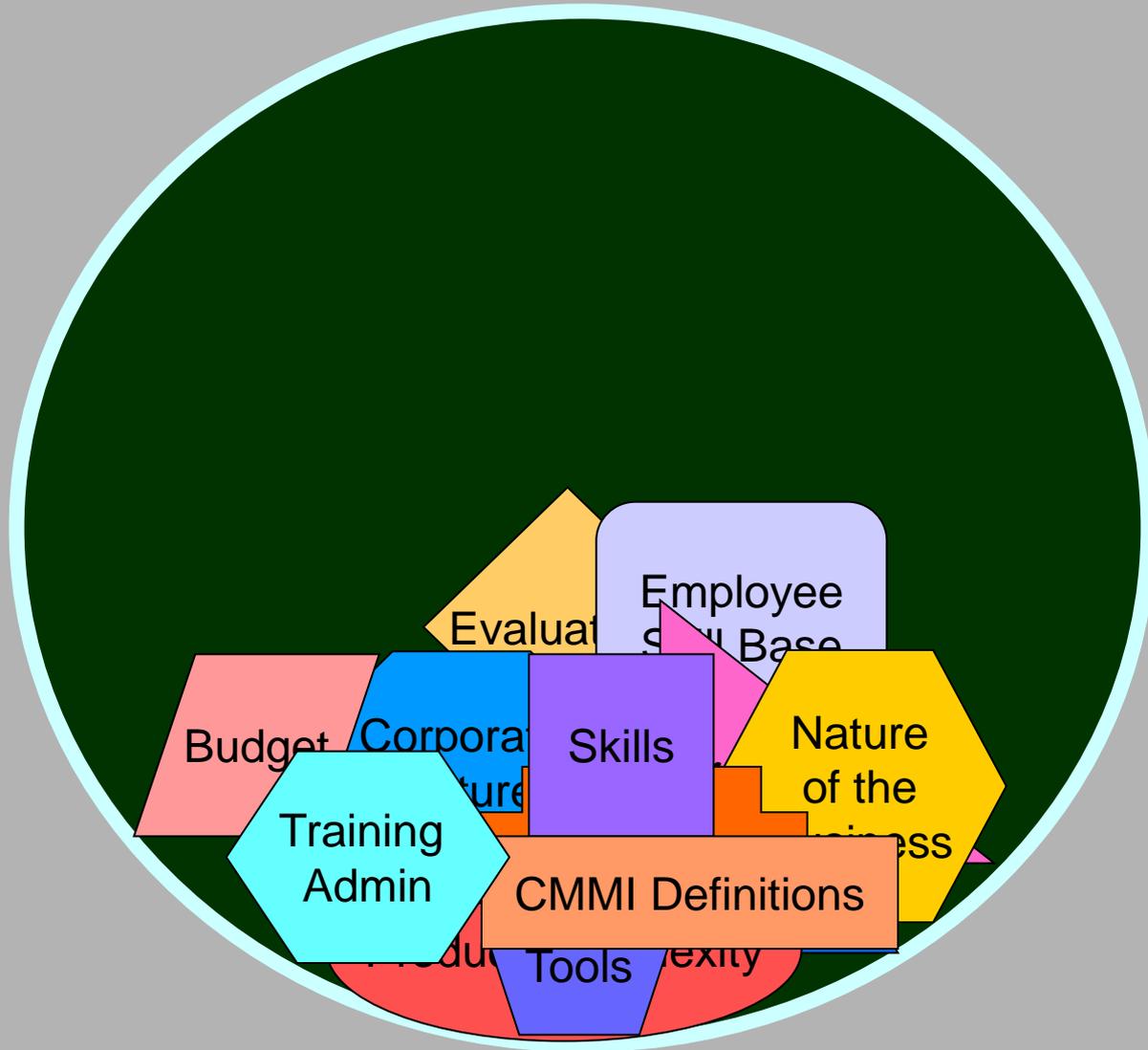
CMMI Training Kaleidoscope



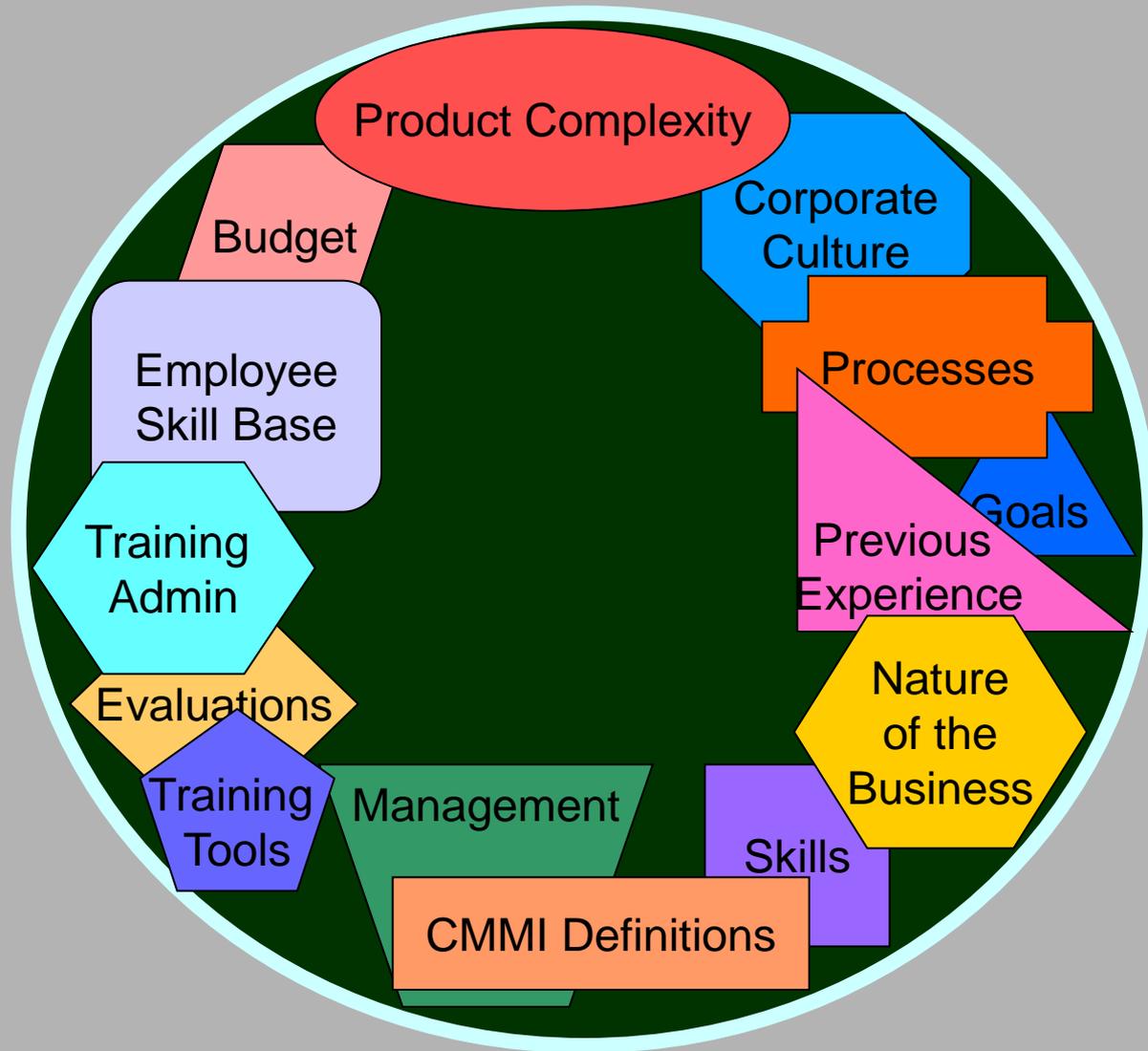
CMMI Training Kaleidoscope



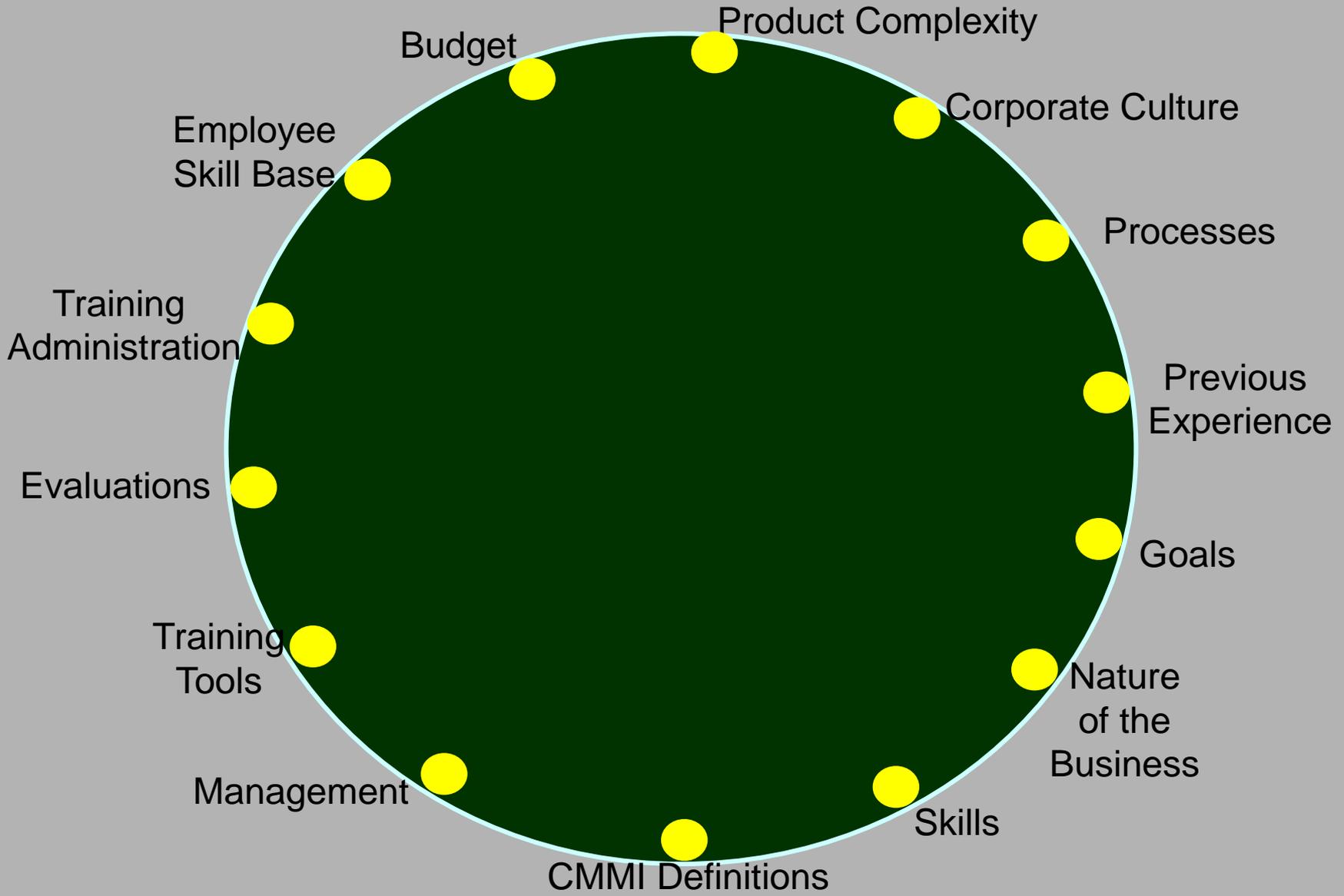
CMMI Training Kaleidoscope



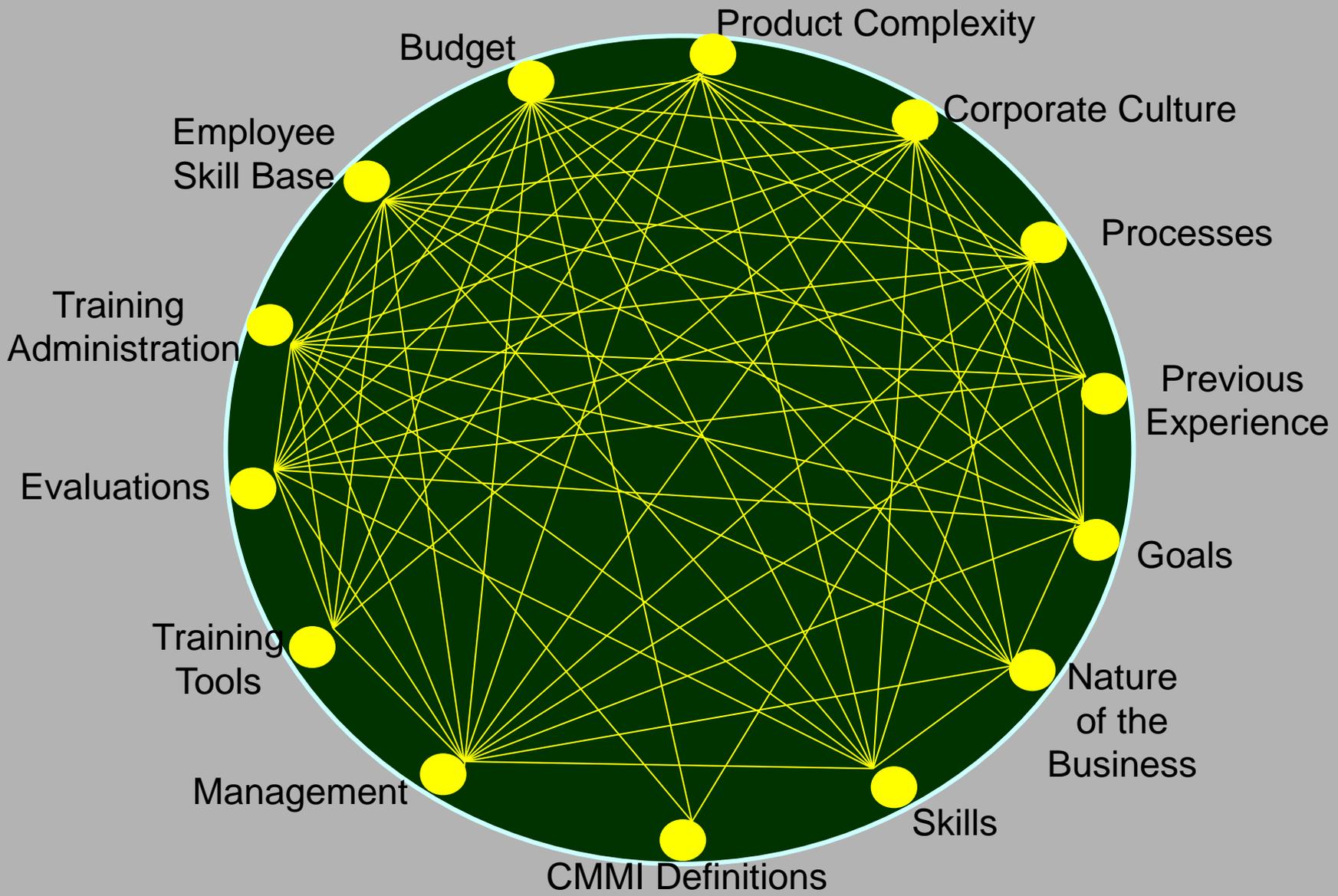
CMMI Training Kaleidoscope



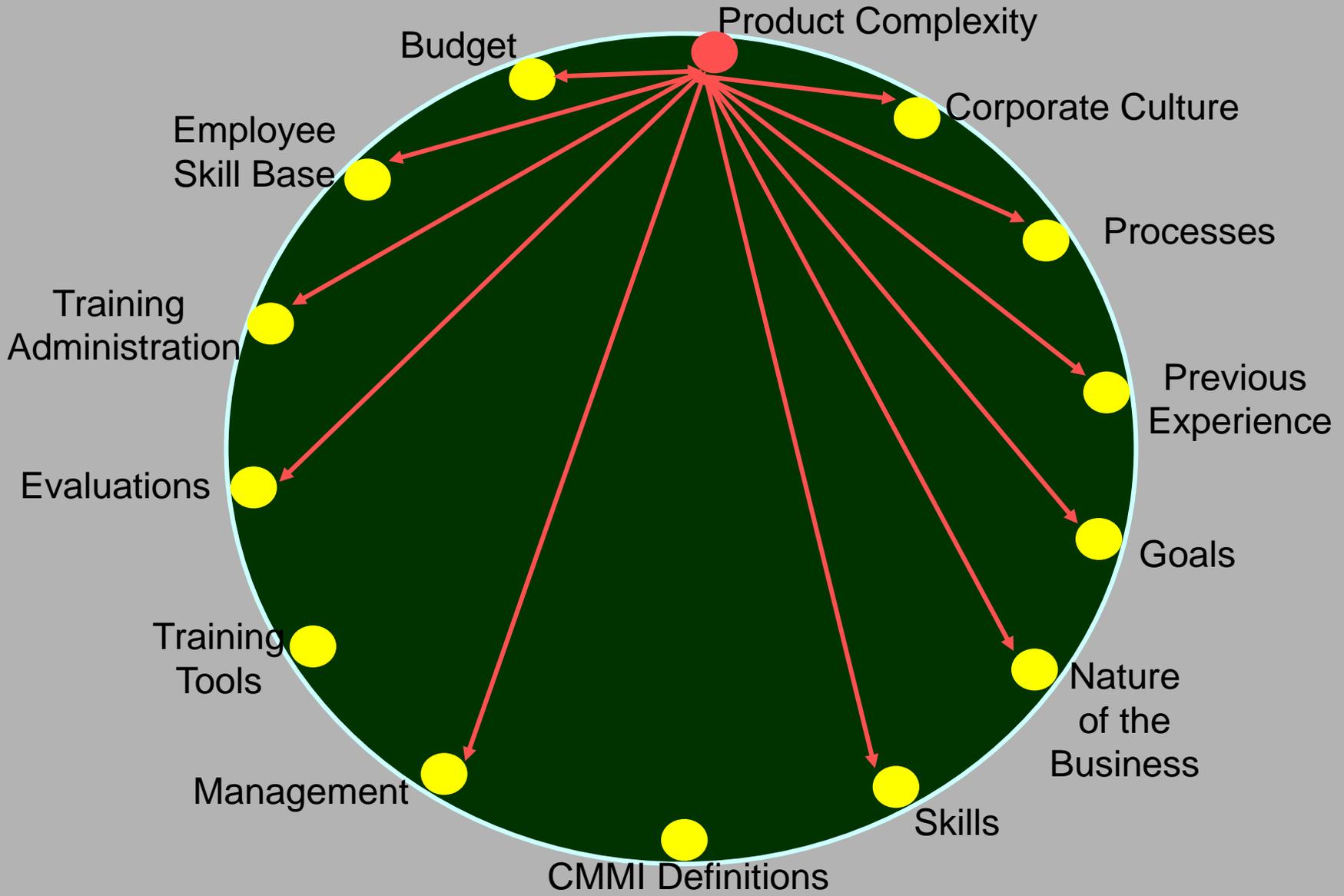
CMMI Training Inter-relationship Diagram



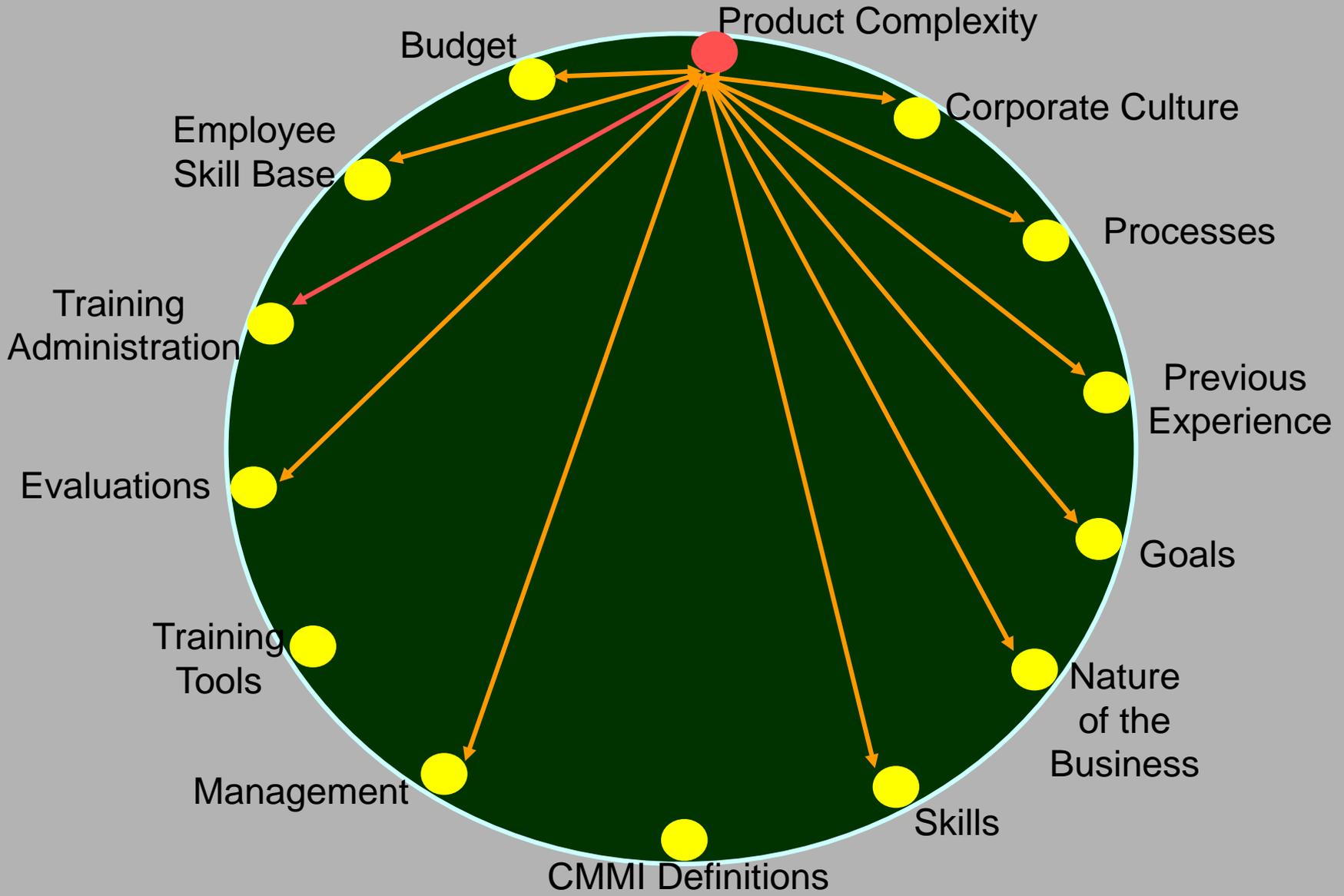
CMMI Training Inter-relationship Diagram



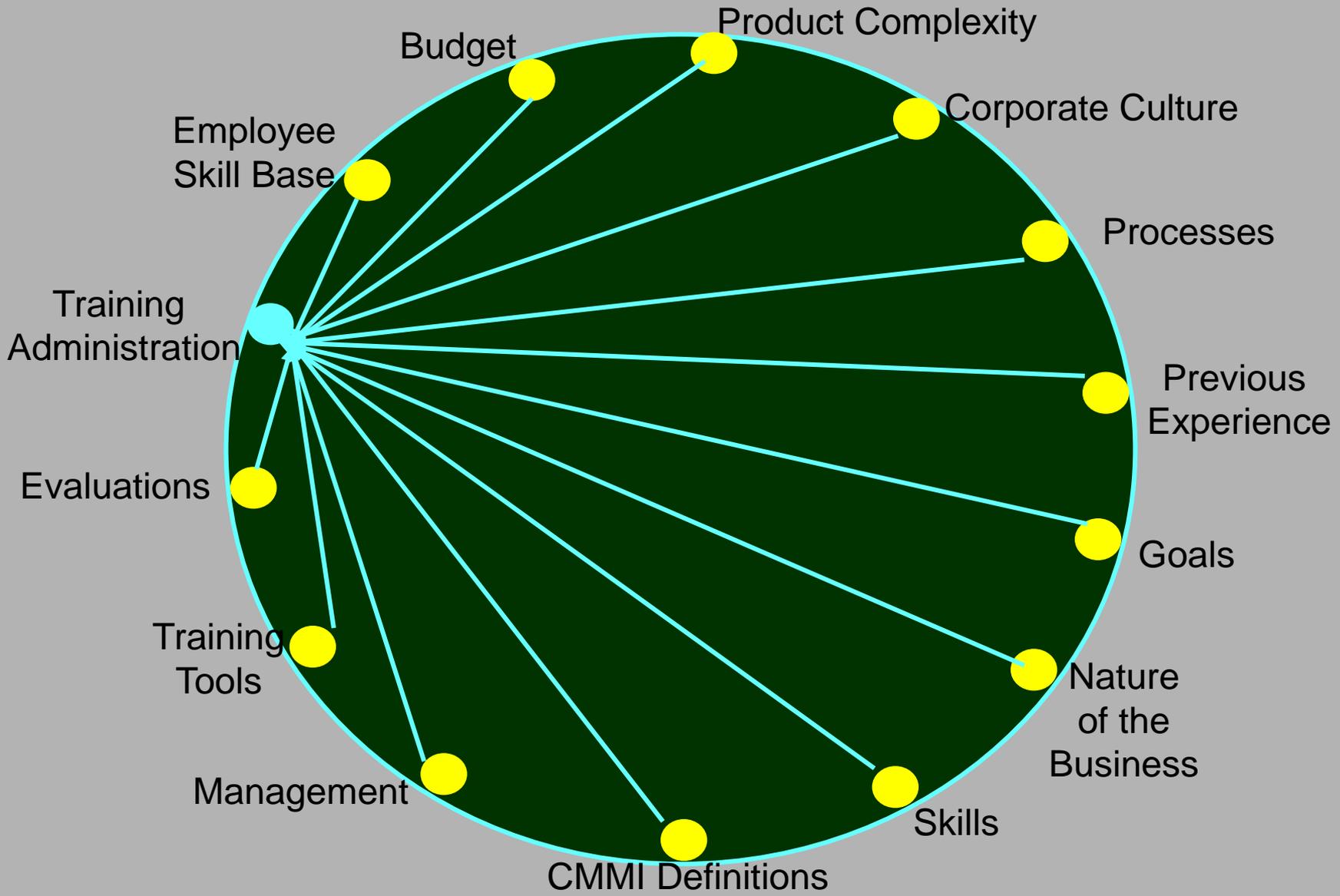
CMMI Training Inter-relationship Diagram



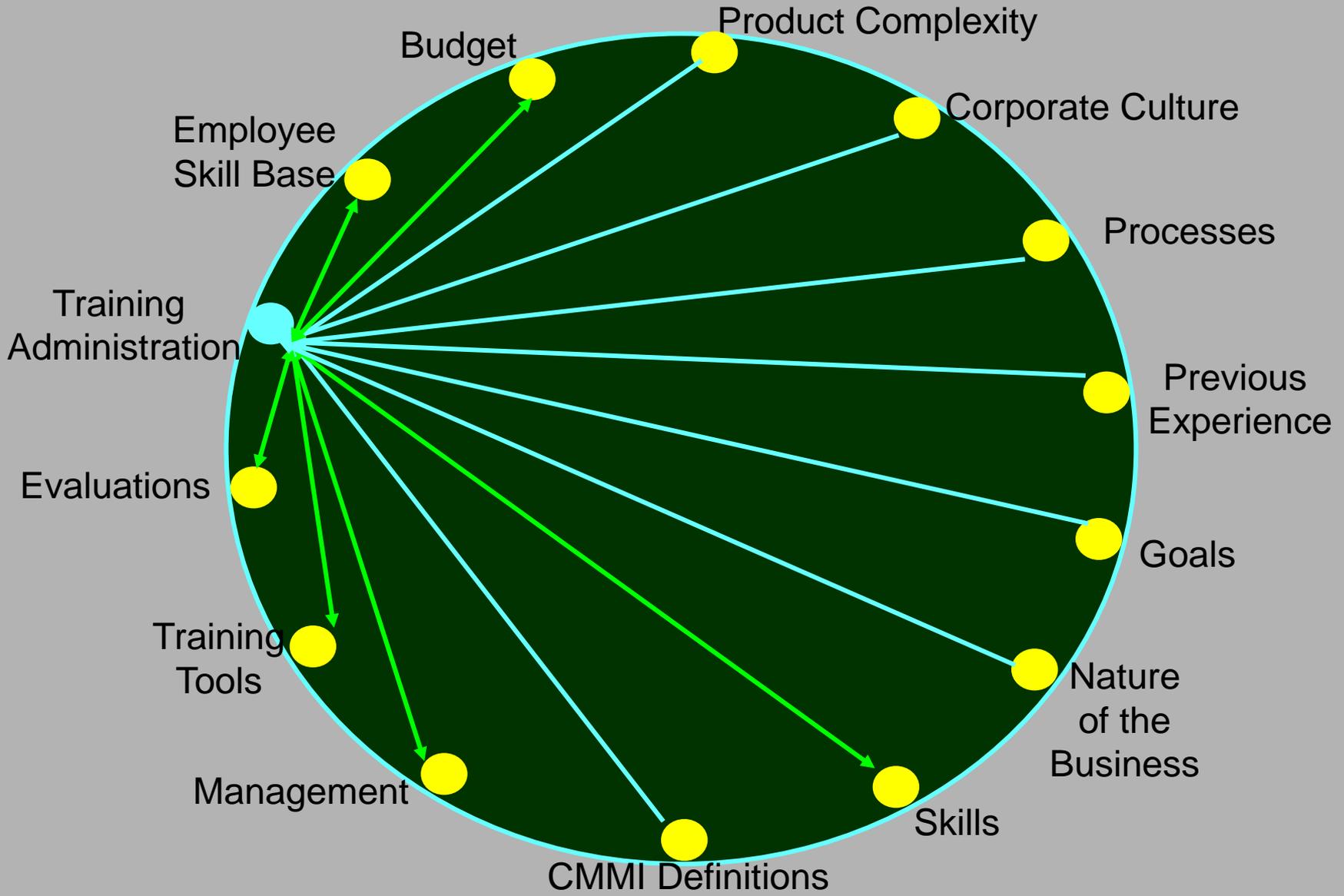
CMMI Training Inter-relationship Diagram



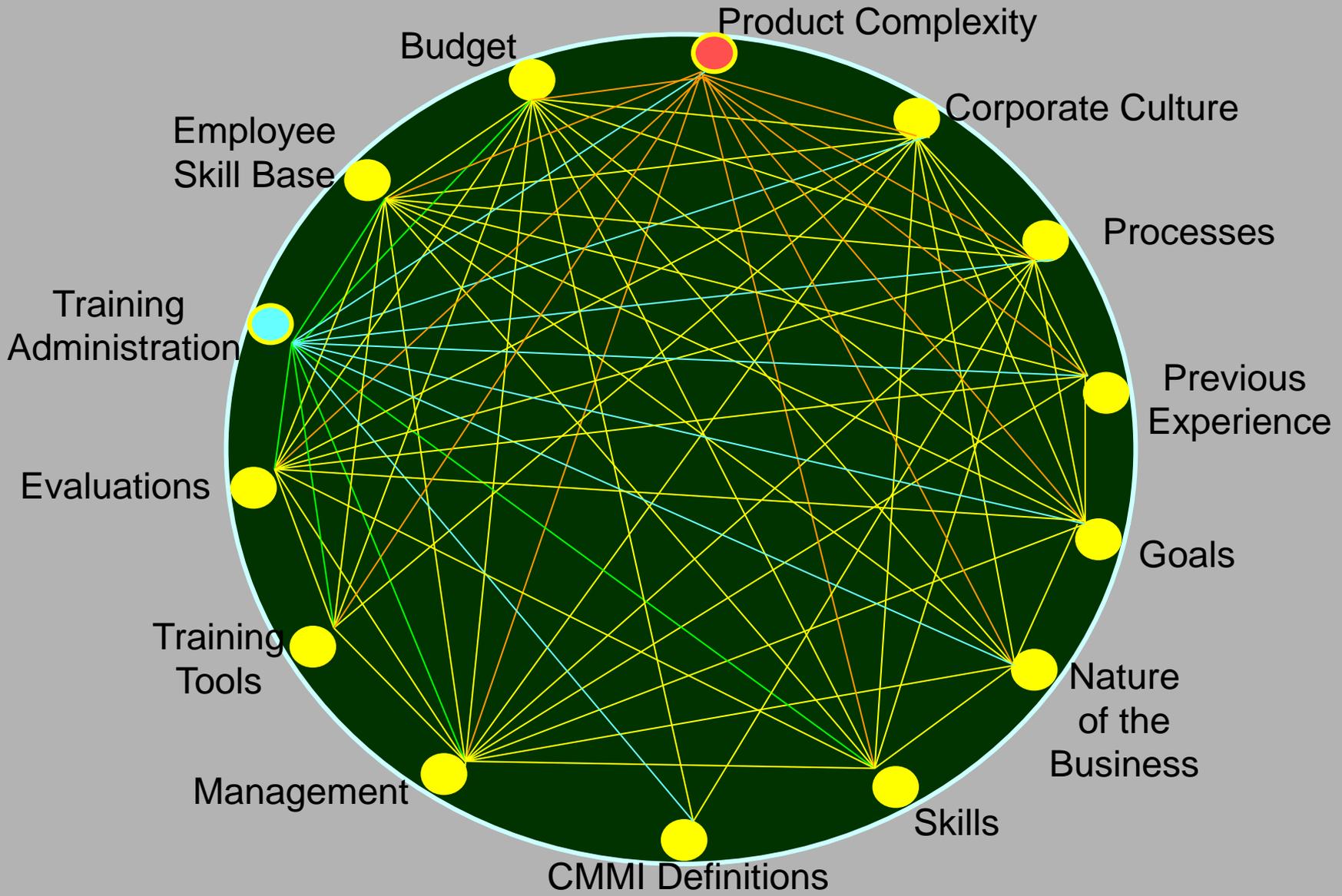
CMMI Training Inter-relationship Diagram



CMMI Training Inter-relationship Diagram

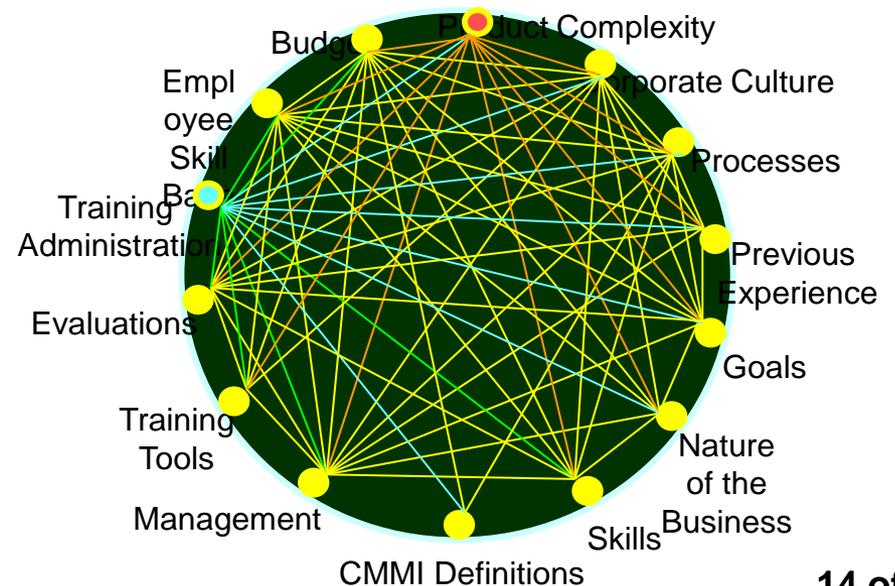


CMMI Training Inter-relationship Diagram



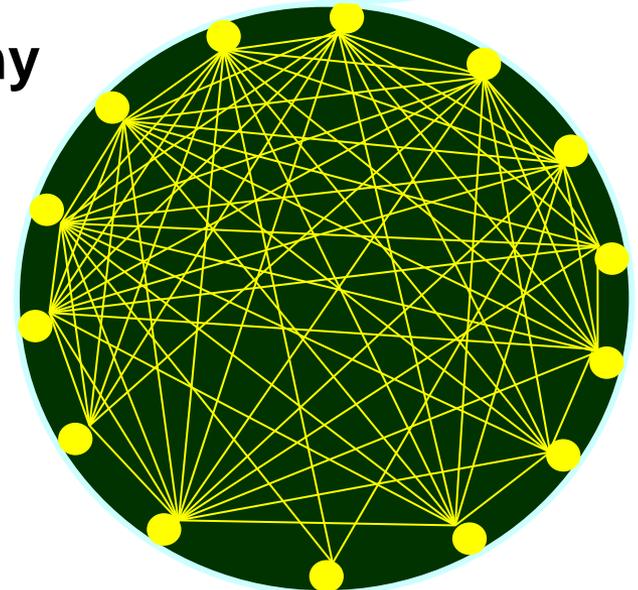
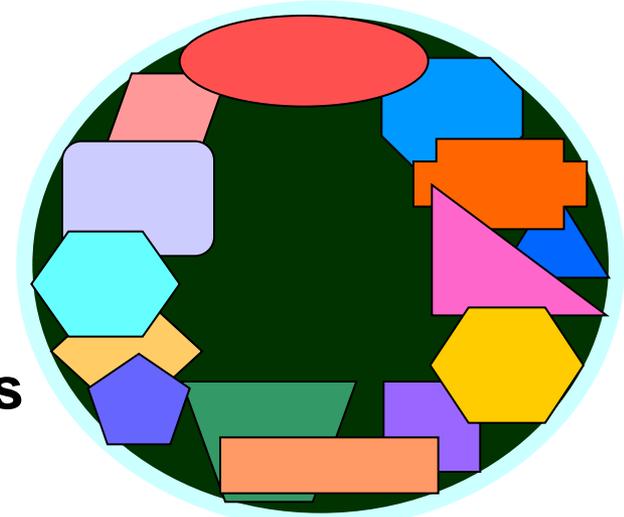
CMMI® Training – Navigating the Pitfalls

- Who needs/provides training?
- What's the goal?
- Where/How is training provided?
- When is training needed?
- Why is training needed/not needed?



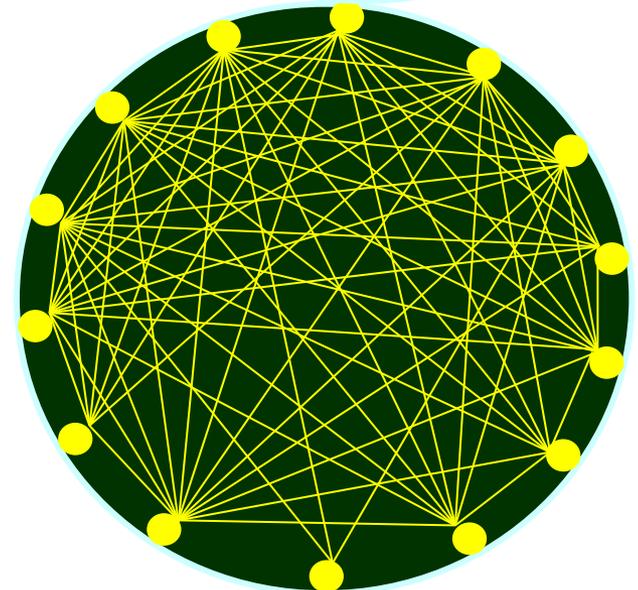
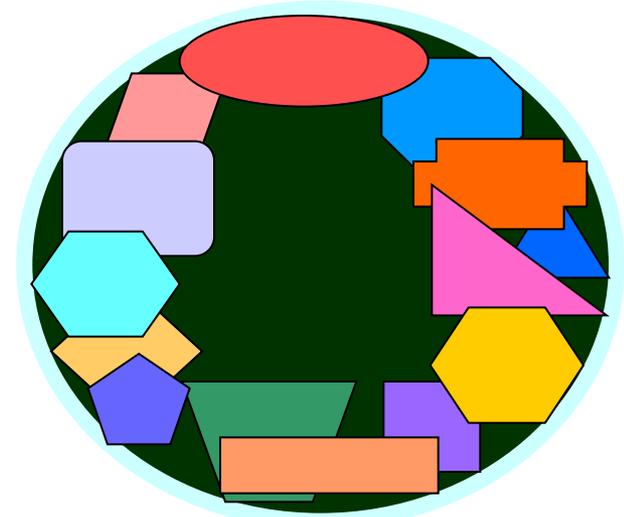
CMMI® Training – Getting it Right

- **Factors in Getting It Right**
 - **Complexity of the product**
 - **Nature of the business**
 - **Expected skill base of the employees**
 - **Corporate culture & organization**
 - **Importance of CMMI to the company**
 - **Laws & regulations**



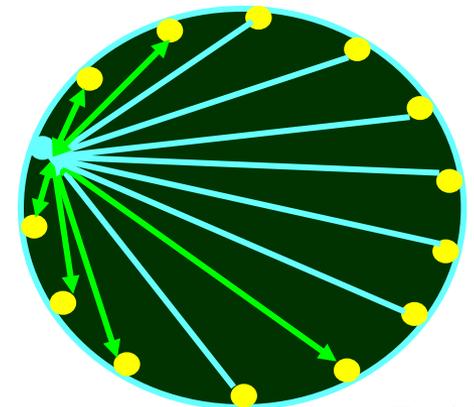
CMMI® Training – Typical Training Issues

- Administration
- Budget
- Business Complexity
- Contracts
- Metrics
- Need Identification & Communication
- Process/Skill/Tool Training
- Process Architecture & Definition
- Process Format
- Physical Plant
- Role Definition
- Training Tools
- Updates & Training
- Waivers



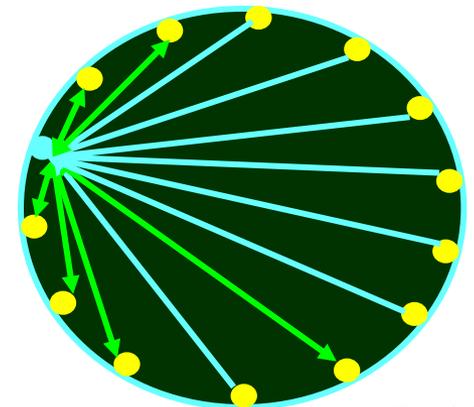
Training Administration & the Other Training Issues

- **Training Administration and Budget**
 - **What is the baseline level of competency?**
 - **What is the expected level of competency?**
 - **Who pays for what?**
 - **process or skill training**
 - **process or tool training**
 - **process updates and training material updates**



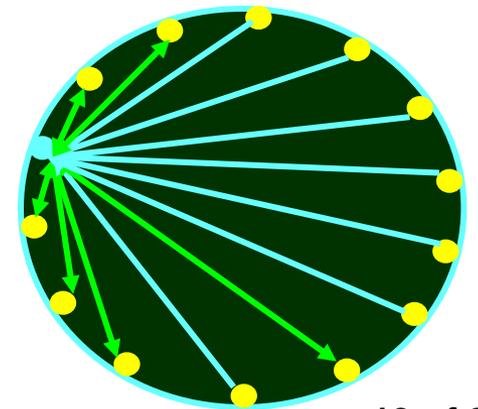
Training Administration & the Other Training Issues

- **Training Administration and Business Complexity**
 - **Number of products**
 - **Contract requirements**
 - **Legal and regulatory requirements**
 - **Multiple levels of training requirements**
 - **Single or multiple sites**
 - **Size of the workforce**
 - **Diversity of the workforce**



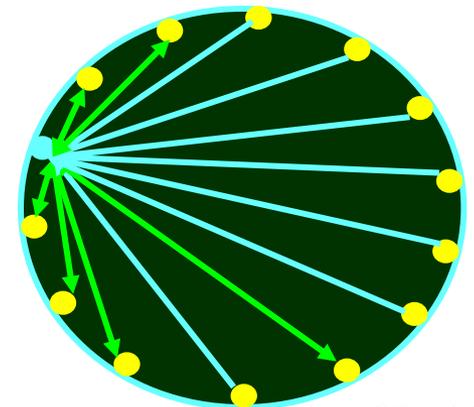
Training Administration & the Other Training Issues

- **Training Administration and Contracts**
 - **Budget for upgrade training**
 - **Whose budget?**
 - **Scheduling of training**
 - **Cost factored into the proposal?**



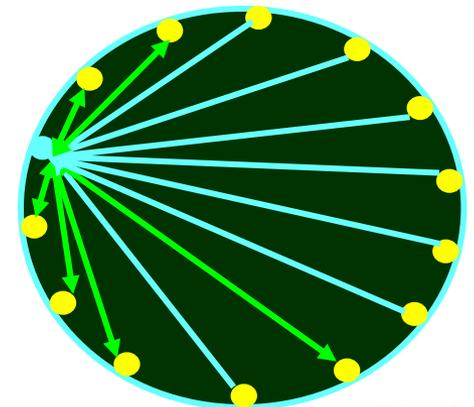
Training Administration & the Other Training Issues

- **Training Administration and Delivery Methods**
 - **On the Job Training**
 - **Web**
 - **Instructor-led**
 - **Mixed delivery**
 - **In-house or external**
 - **Simulations**



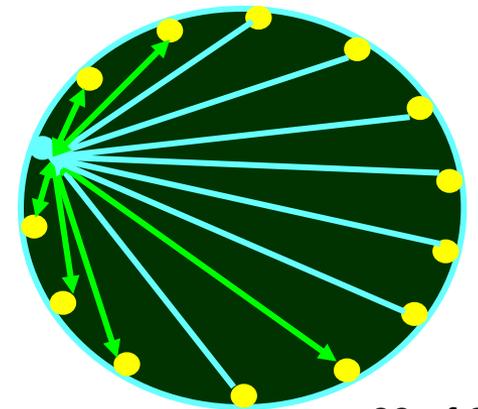
Training Administration & the Other Training Issues

- **Training Administration and Metrics**
 - **Format – individual, project, manager, roll-up**
 - **Whose budget?**
 - **What do the metrics tell about the training?**
 - **Quality**
 - **Quantity**
 - **Skill level**
 - **Who needs to know what, why, and when?**
 - **Course completions**
 - **Competency levels**
 - **Personally Identifiable Information**
 - **What are the success criteria?**



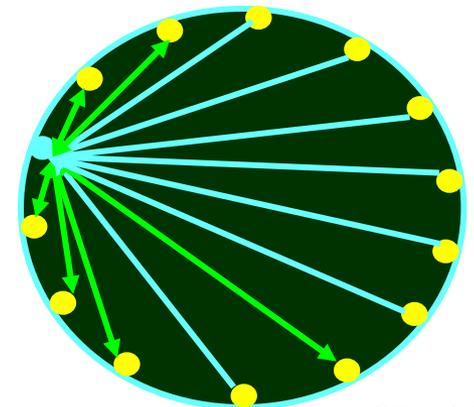
Training Administration & the Other Training Issues

- **Training Administration & Need Identification**
 - **Identification of training needs**
 - **Communication of training needs**
 - **Need to maintain currency**



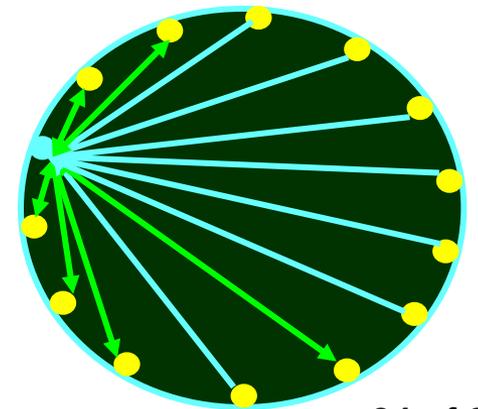
Training Administration & the Other Training Issues

- **Training Administration & Processes**
 - **Definition of ‘process’**
 - Series of tasks to produce an output
 - Process or skill?
 - Tool instructions
 - Multiple sites
 - **Process Hierarchy**
 - **Process Updates**
 - **Process Format**
 - **Process Inter-relationships**
 - **Process detail**



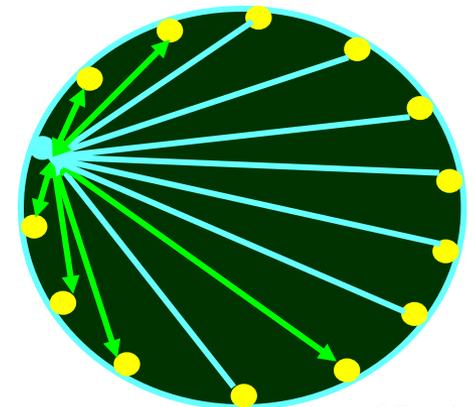
Training Administration & the Other Training Issues

- **Training Administration and Skill/Tool Training**
 - **Definitions**
 - **Budget**



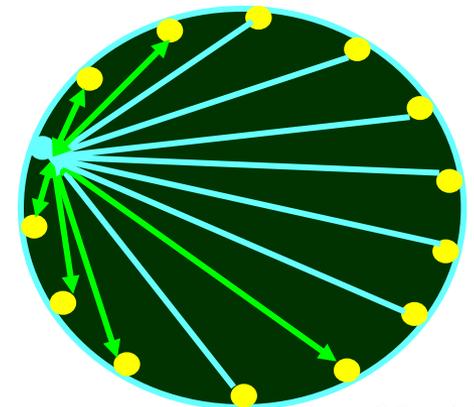
Training Administration & the Other Training Issues

- **Training Administration and Role Definition**
 - **Consistent definition**
 - programs
 - sites
 - processes
 - departments
 - **Level of detail in the definition**
 - budget
 - scheduling of training



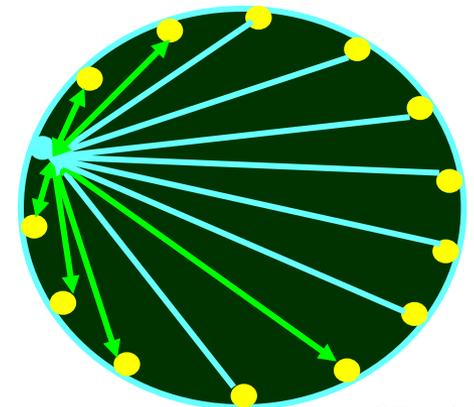
Training Administration & the Other Training Issues

- **Training Administration and the Training Tool**
 - **Course equivalents**
 - **Course waivers**
 - **Course updates**
 - **Course Curricula**
 - **Number of courses**
 - **Number of people**
 - **Questionnaires**
 - **Scheduling**
 - **Cancellations**



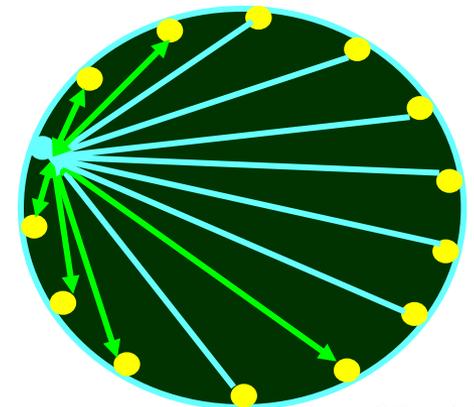
Training Administration & the Other Training Issues

- **Training Administration and the Training Tool cont'd**
 - **Number of**
 - **courses**
 - **people**
 - **sites**
 - **roles**
 - **levels of competency**
 - **processes**
 - **skills**
 - **available instructors**
 - **available training venues**



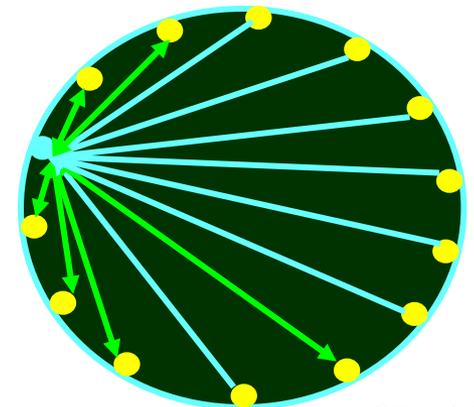
Training Administration & the Other Training Issues

- **Training Administration and Training Tool**
 - **Multiple users**
 - **Multiple levels of access**
 - **Multiple levels of requirements**
 - **Federal, state, and local laws and regulations**
 - **Head office, division, sites, projects**
 - **Budget**
 - **Upgrades**
 - **Training on how to use the tool**
 - **COTS or DIY**



Training Administration & the Other Training Issues

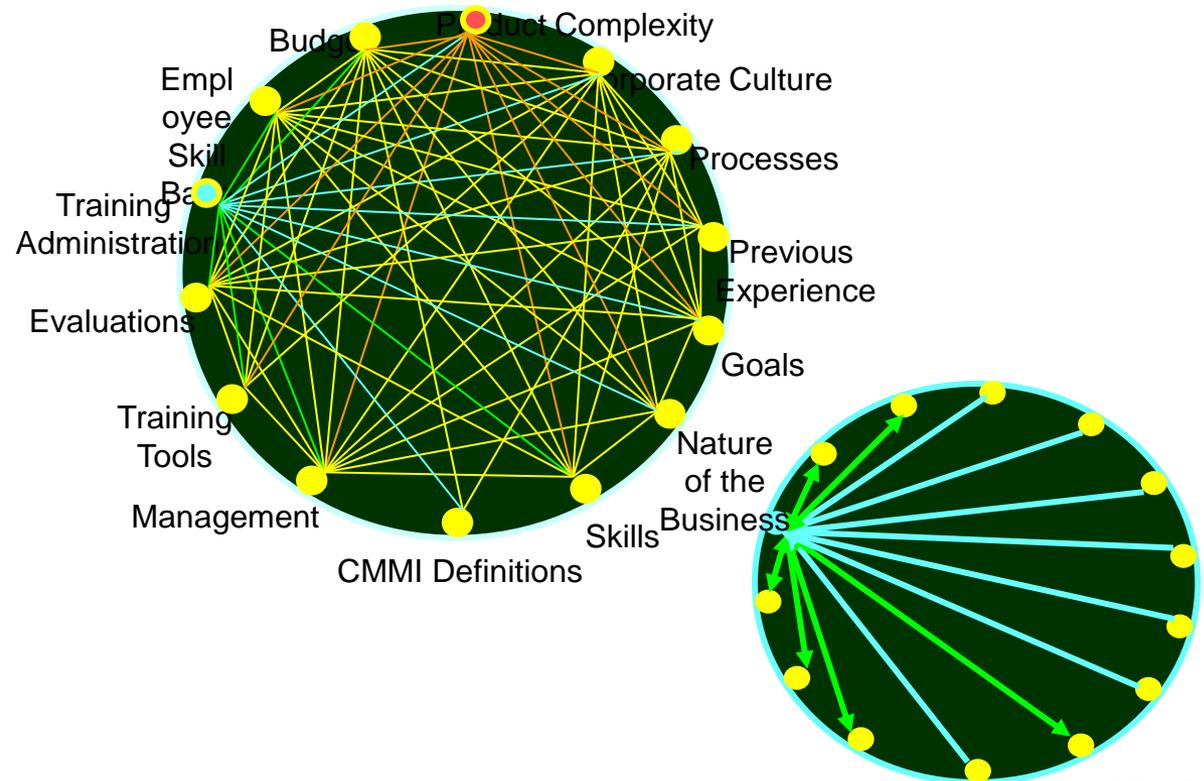
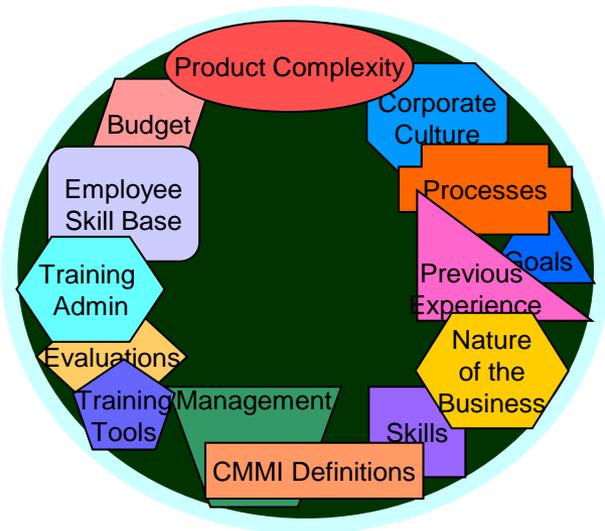
- **Training Administration and Updates**
 - Training materials are part of the tool/process/skill level updates
 - Budget – whose?
 - Impact of out of date training materials



Summary Training Administration and CMMI®

■ Training Administration

- Is inter-related with multiple aspects of the business
- Impacts all areas of training

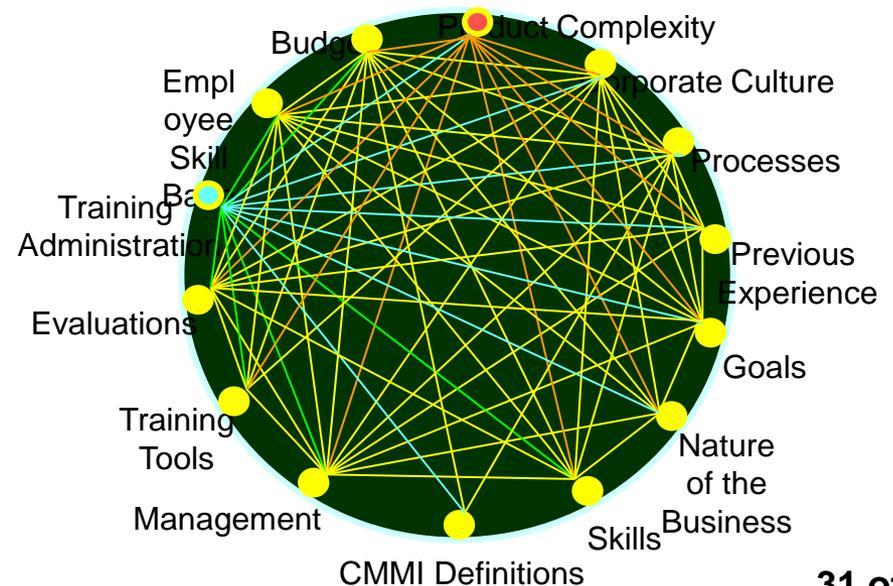


Summary Training Administration and CMMI®

■ Training Administration

- Does the discipline of CMMI assist the development and maintenance of the training program? In other words the administration of the training program?

– How is that impact evaluated?

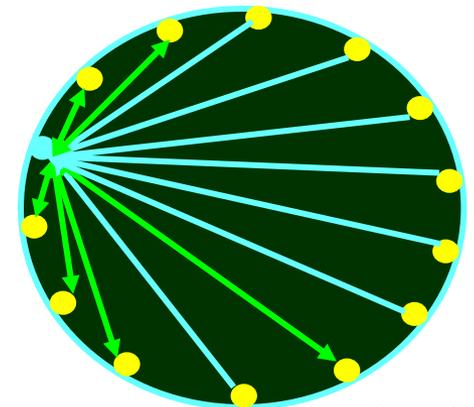


CMMI® Training – Avoiding Waste and Ineffectiveness

- **If CMMI were no longer a business need, would you keep doing training the same way?**
 - **What would be dropped?**
 - **What would be retained?**
 - **What are the criteria for making these decisions?**

CMMI® Training – Avoiding Waste and Ineffectiveness

- What is being done in the name of CMMI that is not necessary?
 - How do you know it's not necessary?
 - How do you know it is necessary?



CMMI® Training – Avoiding Waste and Ineffectiveness

- **Is your CMMI implementation being done in the Leanest way possible?**
- **Is it being driven by your inefficiencies?**

Any Questions?

