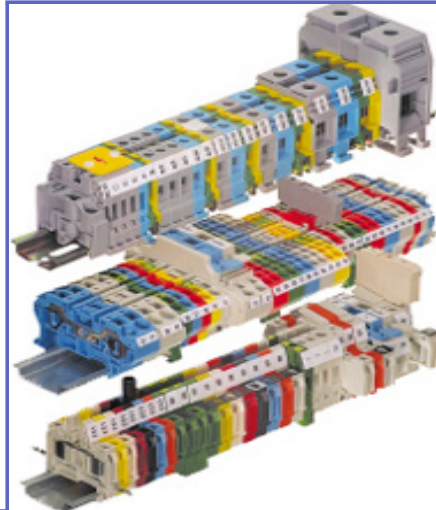


Use of IDEAL Model in a Multi-Organization Environment

CMMI Conference 2008

Denver, CO



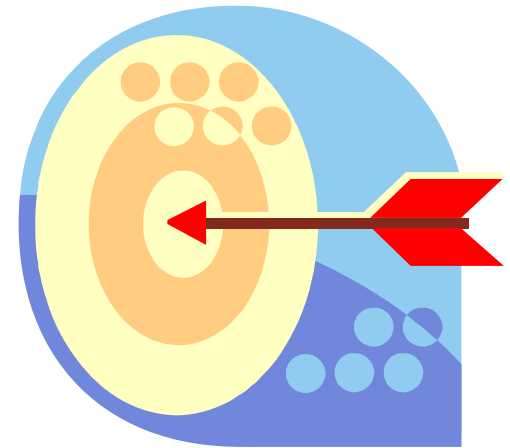
Aldo Dagnino

**ABB Inc.
US Corporate Research
Center
Raleigh, NC**



Presentation Objective

- In this presentation you will learn how the SEI IDEAL model is used in a multi-national organization to manage CMMI continuous process improvement cycles and introduction of new technologies for product development into the business units



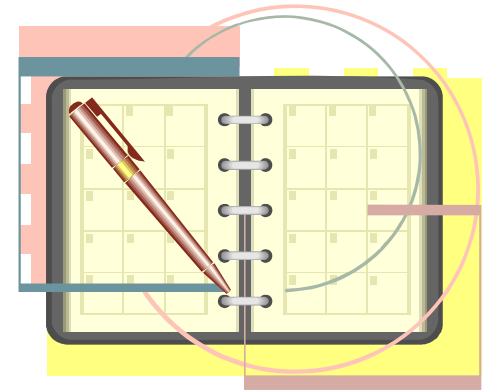
**“The people who are crazy enough to think
they can change the world are the ones who do”**

Apple Computer, Inc., television add, CNN, December 15th of 1997



Presentation Agenda

- Examples of activities where IDEAL has been successfully employed
- IDEAL in SPI activities
- IDEAL in introduction of new technologies which result in considerable change
- IDEAL in new product development



CMMI-based Process Improvement Projects

- Analyze and assess development processes of software-intensive systems and use CMMI best practices to implement software process improvement (SPI) projects to fulfill specific business objectives of each business unit
- Manage SPI cycle at the Business Area level, which incorporates clusters of Business Units, which share a common set of goals

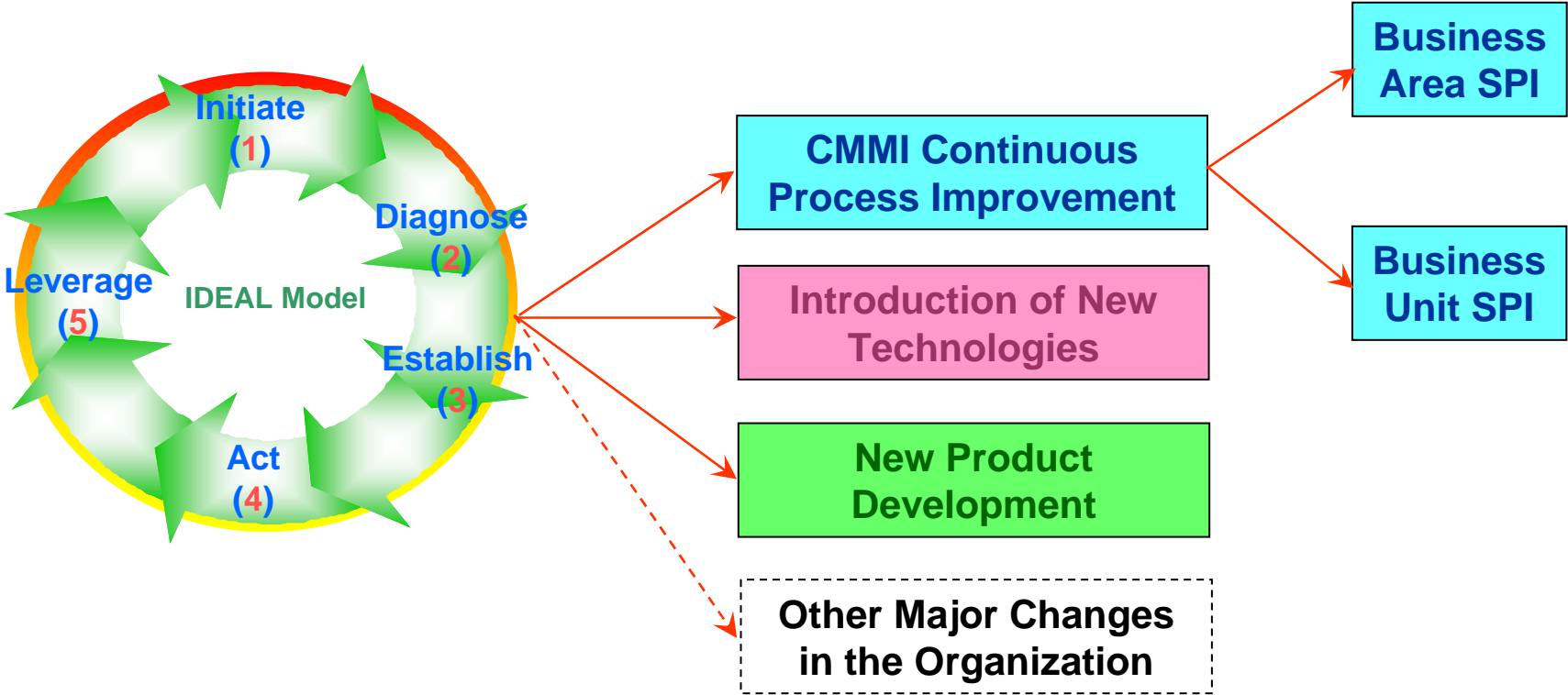


Introduction of New Technologies and/or New Product Development

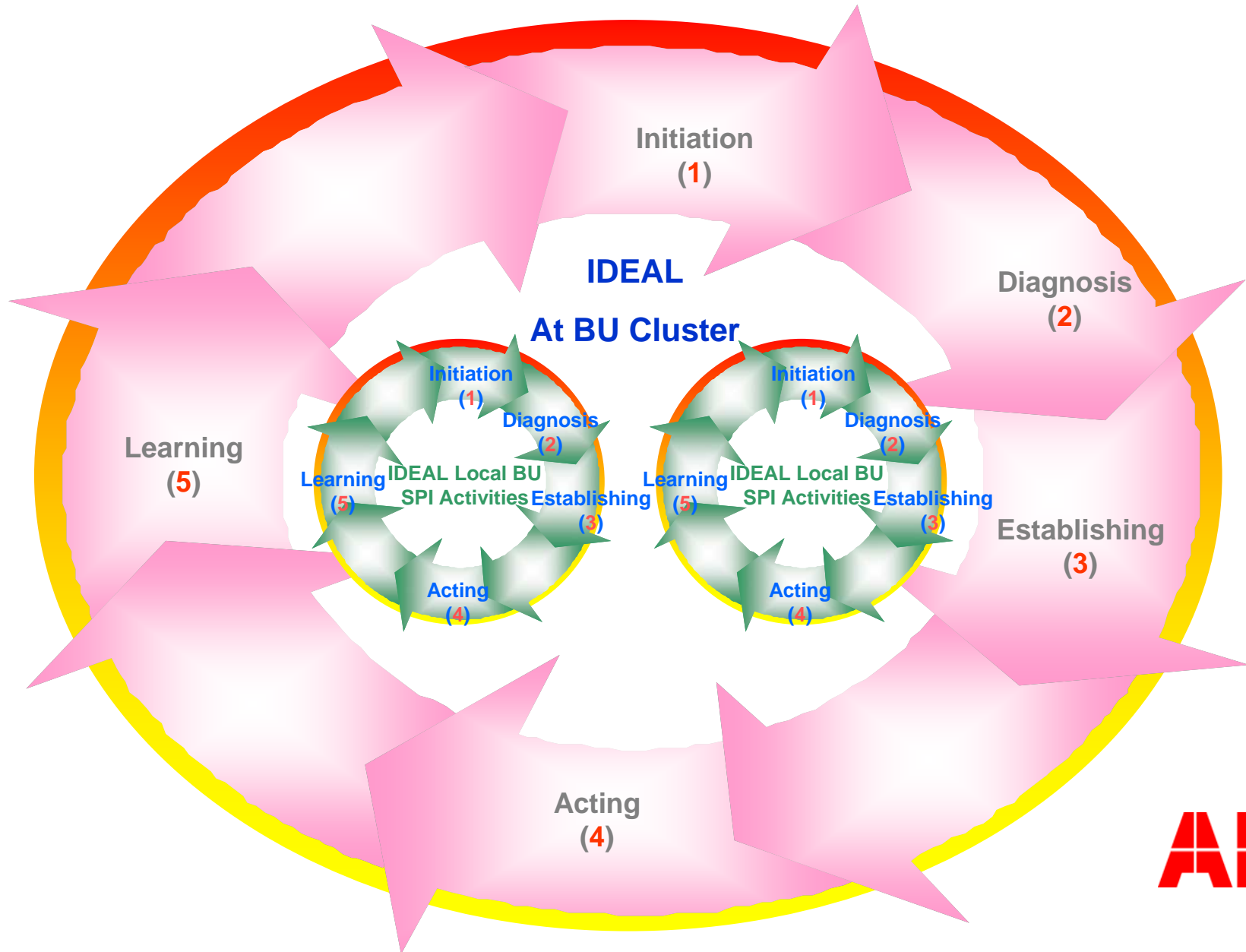
- Analyze and determine how a new technology can be used to enhance software-intensive products in the development Business Unit and/or to develop new products based on specific business objectives. These activities often result in product re-architecting activities



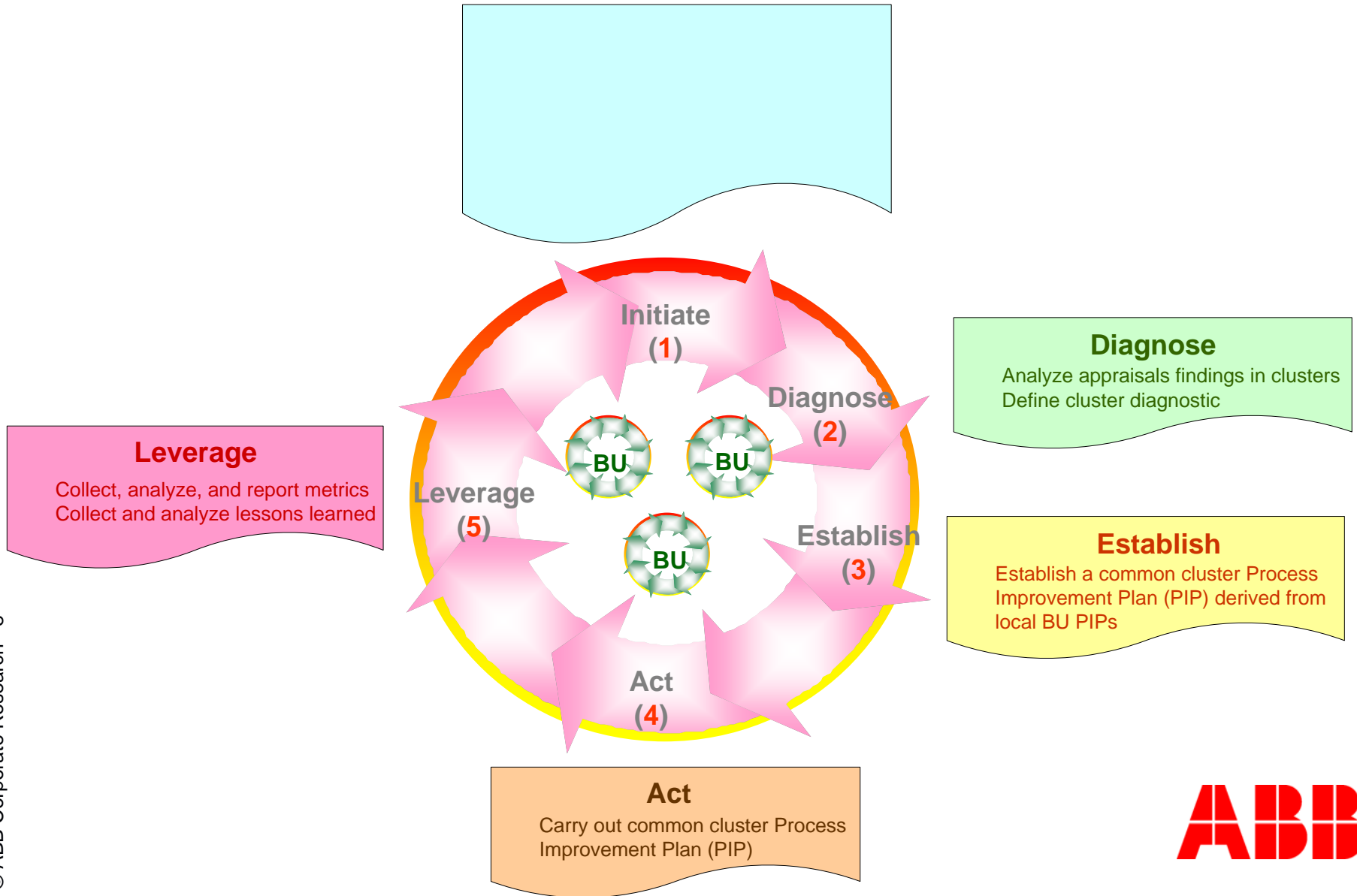
IDEAL Model to Manage Change in the Organization



IDEAL Framework for Continuous Process Improvement



IDEAL Framework for SPI at BU-cluster Level

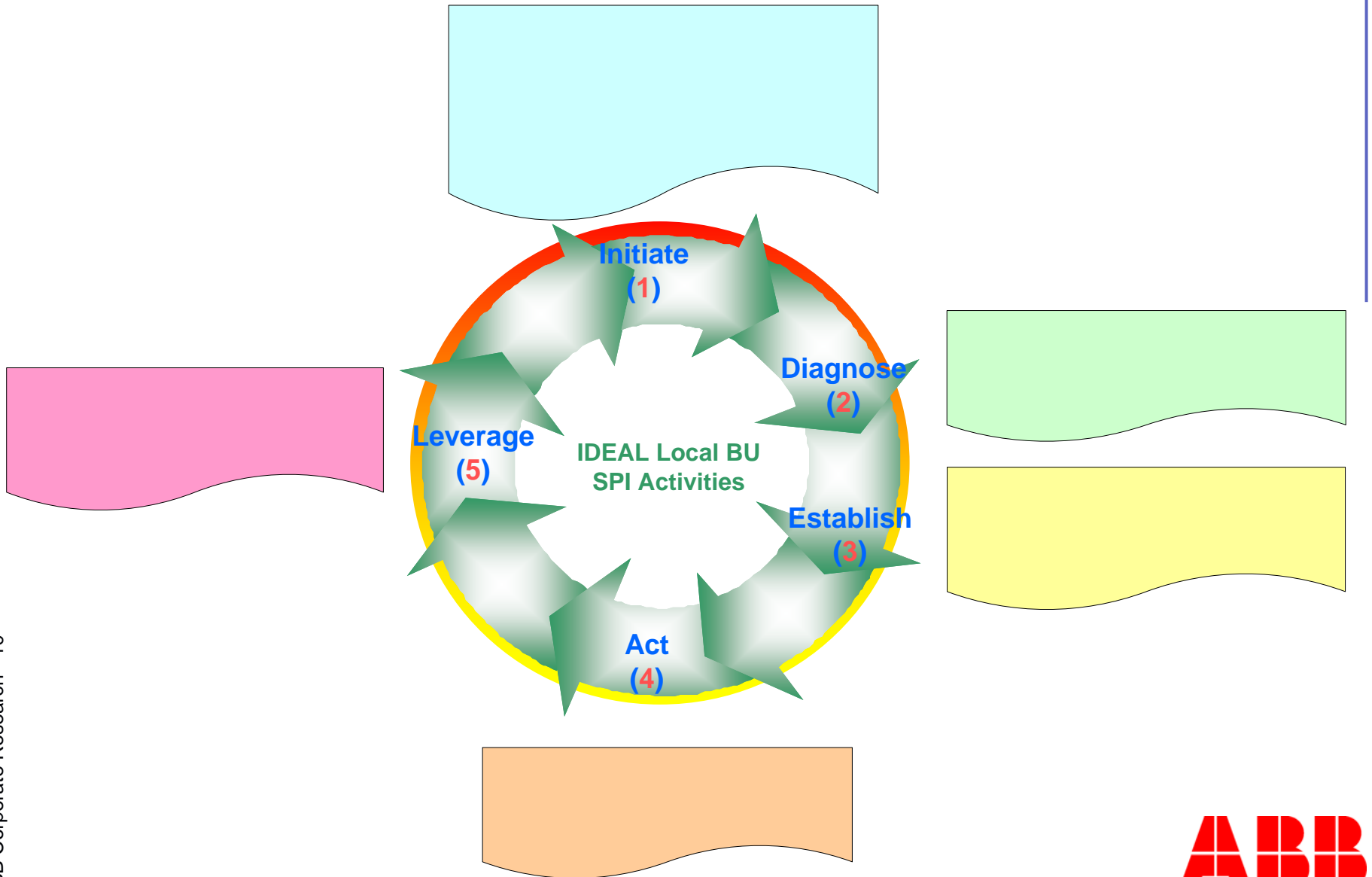


Discussion – IDEAL SPI at BU-Cluster Level

- Need to have a global perspective on business goals, coordination efforts, reporting, and communication within the BU cluster
- Develop a global improvement plan and monitor it
- Ensure business objectives of cluster are filtered to individual BUs
- Have a global change agent that coordinates improvement efforts
- Need to extract commonalities within the cluster to manage the global process improvement activities
- Allow local BU improvement activities to be managed locally
- Define metrics that “make sense” at the cluster level and congruent with metrics at BU level
- Ensure lessons learned from each BU are collected at the end of the cycle



IDEAL Framework for SPI at BU Level

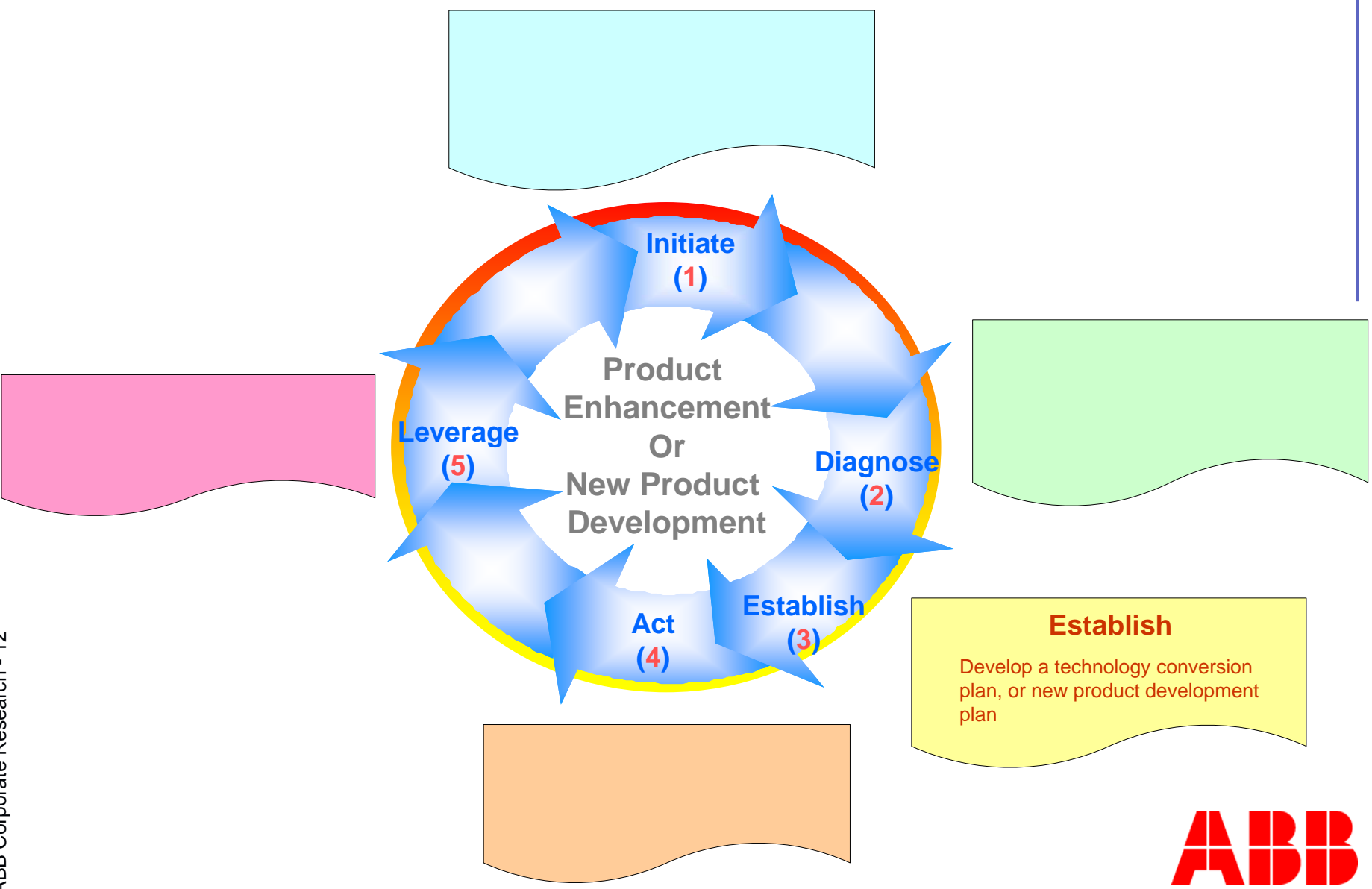


Discussion – IDEAL SPI at BU Level

- Need to create a Strategic Action Plan for Local BU that goes beyond one improvement cycle
- Align local BU business goals with global cluster business goals
- Ensure local BU Sponsor and local Change Agent are in “sync” with global cluster
- After internal CMMI appraisal, develop a Process Improvement Plan that “acts locally but thinks globally”
- Collect metrics and lessons learned as input for next improvement cycle and benefits obtained



IDEAL Framework for New Technology Introduction at BUs



Discussion – IDEAL Introduction of New Technology

- Need to define the business benefits associated with the introduction of new technology or development of new product (identify metrics associated with the business benefit)
- ATAM/ADD/AHP have been used to diagnose product architecture and technology evaluation for new products
- Essential to develop an implementation plan
- Collect metrics and lessons learned



Other Potential Areas where IDEAL can be Applied

- Other process improvement activities:
 - Manufacturing
 - Business
- Introduction of new information systems in the organization
- Internal project to address people issues



Any Questions?



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