A Methodology for Determining the Organization's Readiness for Process Improvement

© ABB Corporate Research -September 2<sup>nd</sup>, 2004



### **Aldo Dagnino**

ABB Inc.
US Corporate Research
Center
Raleigh, NC









#### **Presentation Contents**

- Introduction to ABB
- ABB Process Improvement Initiative
- Definition of Change Readiness
- Motivation for Change
- Relevant Stakeholders
- Organizational Infrastructure for Change
- Evaluating Change Readiness



#### Introduction to ABB

- ABB is a multi-national power and automation technologies corporation that develops products, such as robots, instruments, power delivery components, and monitoring and control systems.
- ABB's customers include industrial companies such as power companies, process industries, and manufacturing plants.
- Beginning in 1999, ABB expanded its corporate strategy to include capabilities for enabling the horizontal and vertical integration of systems, as well as integration of other vendors' products.







# **ABB's Organizational Structure**

- Power Technologies Division
  - Power Systems
  - Medium-Voltage Products
  - High Voltage Products
  - Transformers
  - Utility Automation Systems
- Automation Technologies Division
  - Automation Products
  - Manufacturing Automation
  - Process Automation









#### **ASPI - CEPG Mission**

 To assist ABB organizations to improve their product development processes by implementing a sustained continuous process improvement culture using the Capability Maturity Model Integration (CMMI)

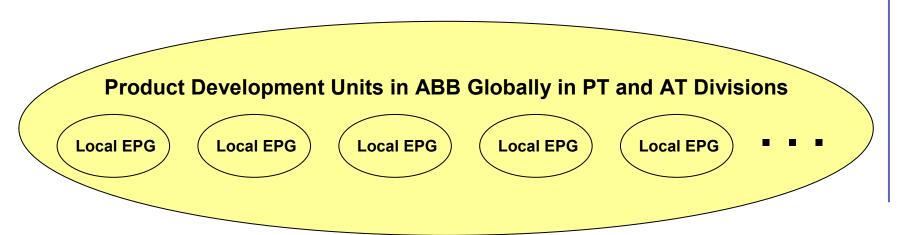


This mission is achieved by employing:

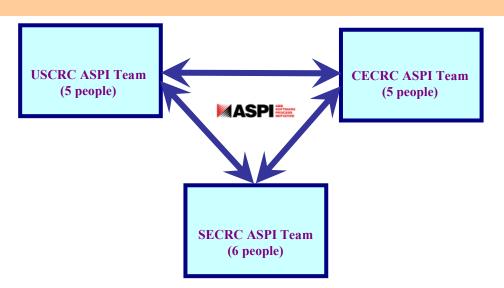
The Capability Maturity Model Integration (CMMI) and IDEAL Model for continuous process improvement



# **ASPI Support**



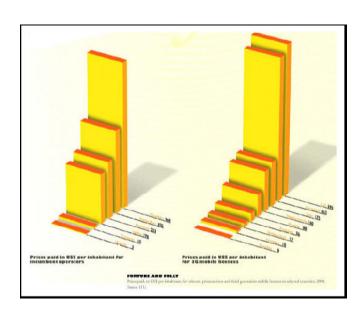
Support ABB Development Units in the Continuous Improvement of their Product Development Processes





### Implementing Continuous Process Improvement at ABB

- Define organization's yearly Business Goals
- Define Process Improvement Plan (PIP)
- Conduct CMMI Appraisal
- Develop Strategic Action Plan (SAP) prioritizing process improvement activities using Business Goals
- Implement PIP and SAP
- Monitor ROI
- Re-start cycle





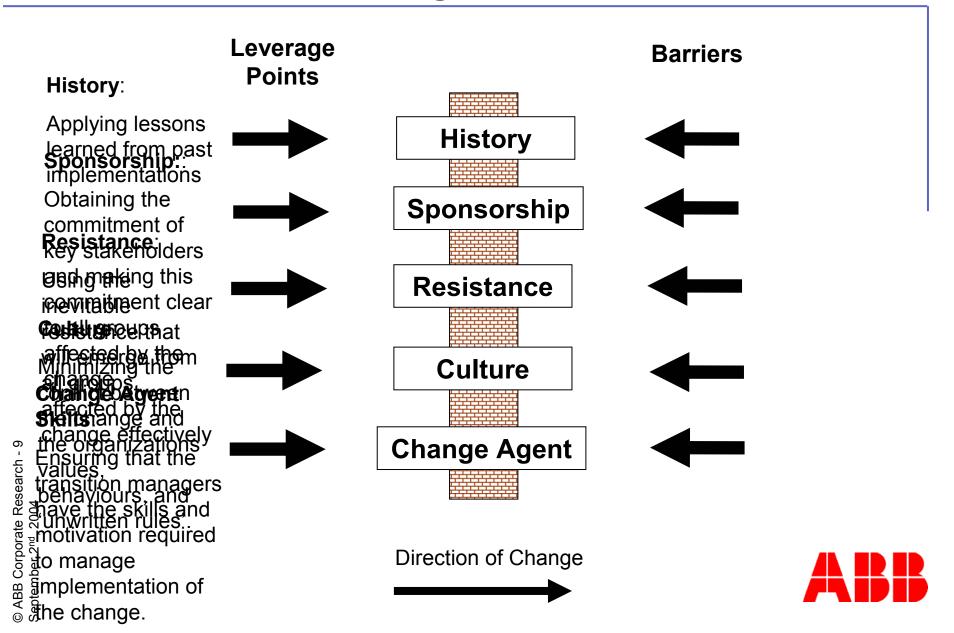
# **Organizational Change Readiness**

- Capability that an organization possesses to adopt new behavior to respond to new challenges in its operational environment
- Change means replacing which is established in favor of something new
- Change occurs in an organization when any part of the organizational system is altered or replaced

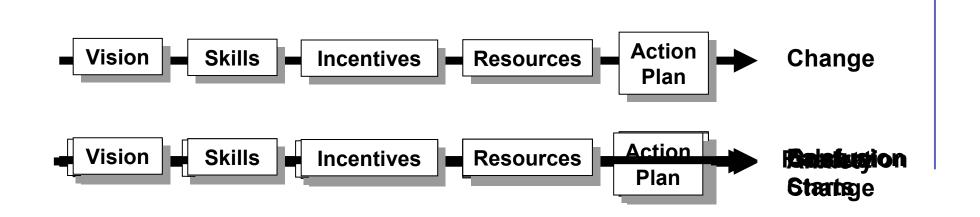




# **MTC:** Forces in Change



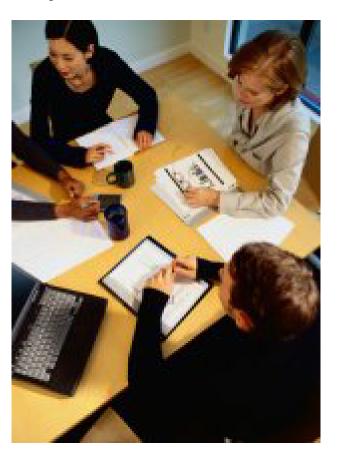
# **MTC: Managing Complex Change**





### Relevant Stakeholders in Process Improvement Projects

- Sponsor of Improvement Activity
- Change Agent
- Affected Organization





### **Sponsor**

- The sponsor in a process improvement project is a decision maker that has resource ownership for product development and process improvement
  - Sometimes it is difficult to identify who the real Sponsor is
  - Sponsor has many responsibilities
  - Sponsor is interested in the "bottom line"
  - The Sponsor can be the "Engaged" type or the "Disengaged" type
  - The Sponsor should be the Leader for change
    - Shows visible commitment to process improvement
    - Puts incentives or dis-incentives in place for behavioral change



### **Change Agent**

- Is the person that will lead the process improvement project and make it successful
- Different types of Change Agents
  - Traditional
    - Focuses on the delivery
  - Facilitator
    - Emphasizes transfer of change to stakeholders
  - Advocator
    - Is a true champion of change



#### Commitment

- Commitment is a pact that is freely assumed, visible, and expected to be kept by all parties (CMU/SEI-94-HB-1, Appendix 6)
- Commitment Types (Abrahamsson, 2001)
  - Affective Commitment
  - Continuance Commitment
  - Normative Commitment





### **Sponsor**

- Communicate to the organization ownership of change
- Select and empower qualified Change Agent
- Work with Change Agent
- Establish an infrastructure for change with incentives
- Commit resources
- Model any changes in behavior
- Continue to communicate

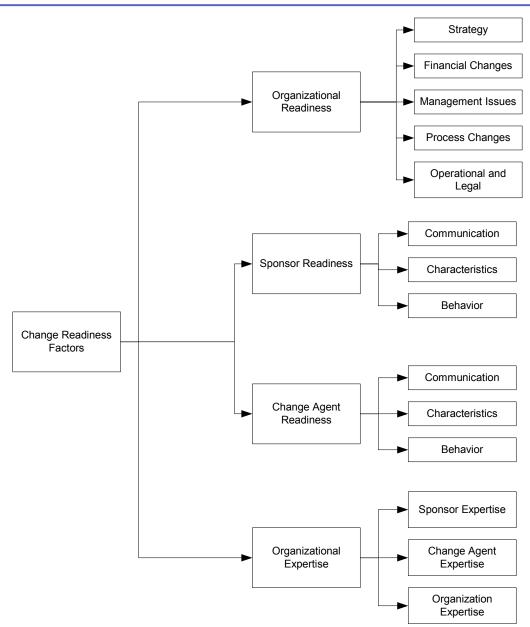


### **Change Agent**

- Work with Sponsor
- Manage process improvement project
  - Build support across the organization for process improvement project
  - Assist affected people in organization
- Collect and consolidate data needed to monitor progress
- Report progress to sponsors
- Identify sources of resistance

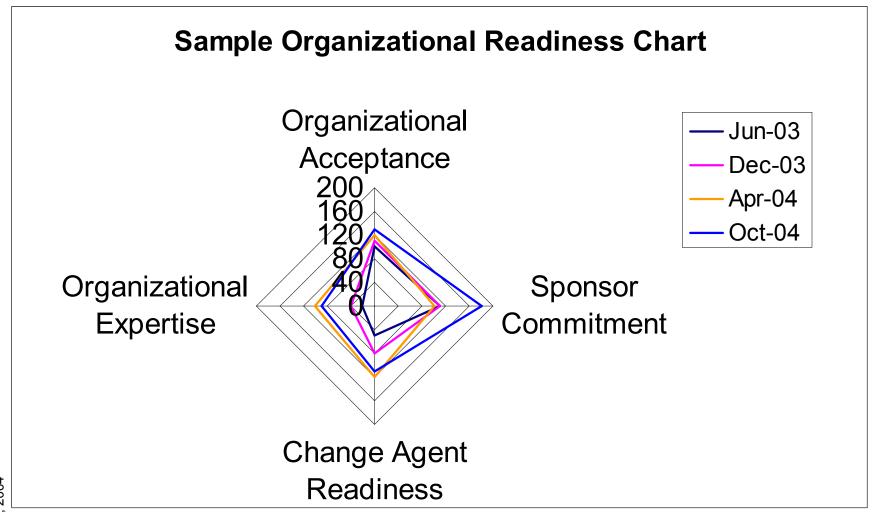


# A Model for Monitoring Readiness





# **Monitoring Readiness for Process Improvement**





© ABB Corporate Research - 18 September 2<sup>nd</sup>, 2004

#### **Lessons Learned**

#### Sponsors

- Limited time and attention span
- Have enormous pressure to show economic benefits
- Sometimes difficult to identify the real sponsor
- Sometimes are not aware their need for training in Cl Management
- No time for training
- Need to continuously communicate
- Change positions often
- Needs to align incentives to reward process improvement
- Needs to align process improvement to business goals
- Needs to make his/her direct reports responsible for process improvement



#### . . . Lessons Learned

#### Change Agents

- Not easy to find
- It is not an attractive role
- Need to have back-ups
- Needs to proactively update the Sponsor
- Needs to proactively communicate to the organization
- Needs to act as the project leader for the process improvement project
- Continuous monitoring of the organizational readiness allows to take corrective actions and maintain the process improvement project moving forward

#### Organization

- Organizational infrastructure for process improvement needs special attention to be created and maintained
- Continuous training required
- Process improvement project needs to be visible



# **Questions?**



