

**N92-12502**

**Group Decision Support Systems**  
Don Petersen, *Collaborative Technology Corporation*

**Abstract**

This talk will look at using computers to support collaboration among members of a business team. The specific application is the augmentation of meetings. The motivation, approach, and empirical results will be presented.

**"What matters most today is the ability to think together, not alone."**

**Harvard Business Review  
Thinking Across Boundaries  
November-December, 1990**

**Collaborative Technologies Corporation**

# Premise

- **Most business work involves a large amount of group work**
- **Most group work involves problem solving**

**Collaborative Technologies Corporation**

## **What is the task of group work in business teams?**

- **Problem solving**
  - **Surface and share ideas**
  - **Surface assumptions**
  - **Evaluate, prioritize, and allocate**
- **Document the process and the results**

## **Why business teams at this time?**

- **Flatter and less bureaucratic organizations**
  - **Cross functional teams**
  - **Pace of change**
  - **Competition**
- **Quality improvement programs**

## **Malcolm Baldrige National Quality Award**

- **Established by the U.S. Congress three years ago**
- **In 1990, 167,000 different companies requested information**
- **Comprehensive, top to bottom assessment of a company**
  - **People**
  - **Processes**
  - **Principles**
- **A shared commitment**
  - **Continuous improvement**
  - **Continuing attention to the customer**

## **Why software to support business teams at this time?**

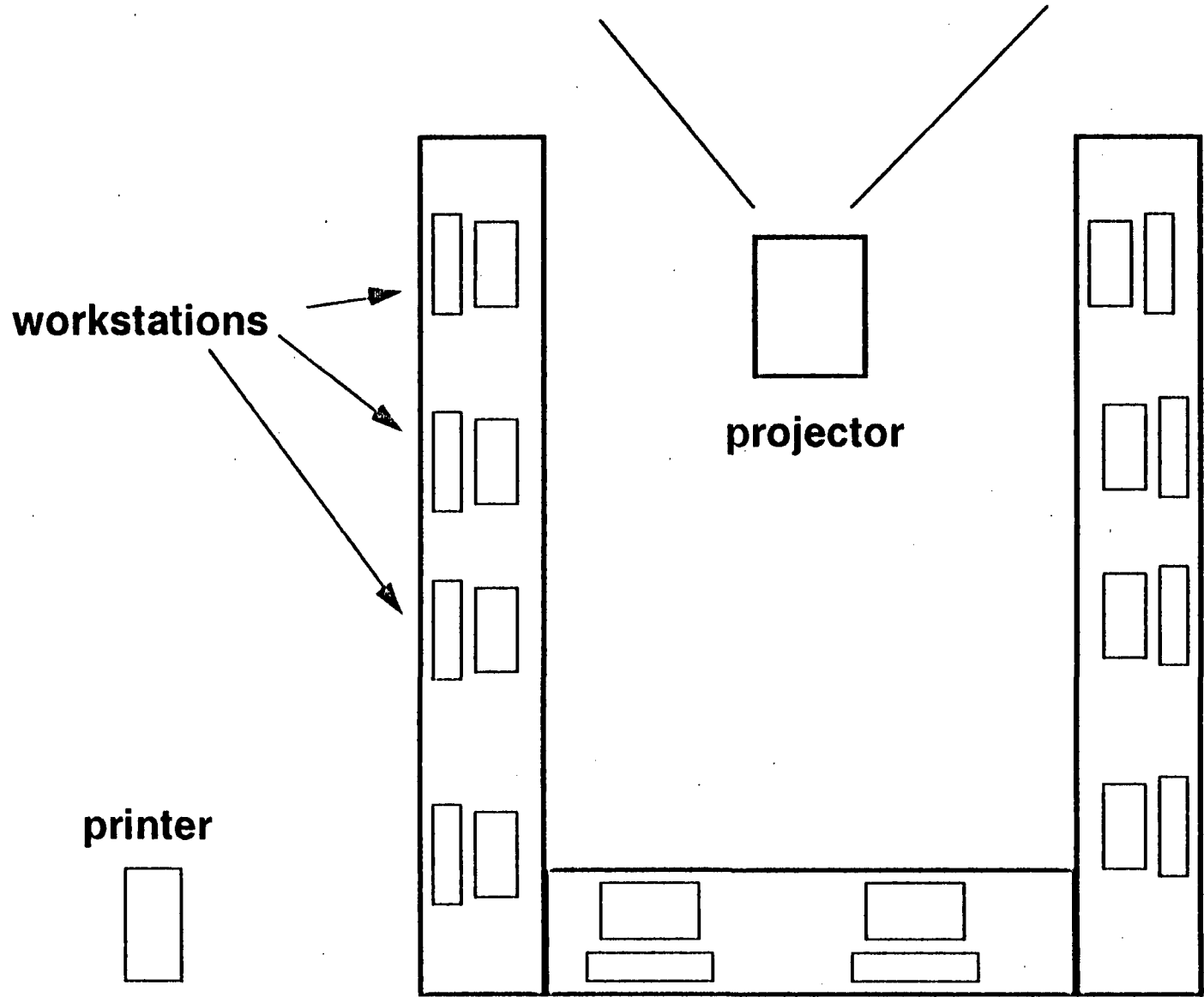
- **Emphasis on teams within industry**
- **Global communications**
- **Availability of enabling technology**
- **Clearly demonstrated need and solution**
- **Hot research topic**

## **What are the major areas of Groupware?**

- **Cooperation**
  - **Email**
  - **Notes programs and bulletin boards**
- **Collaboration**
  - **VisionQuest from CTC**
- **Coordination**
  - **Cooperation from NCR**



# Meeting Room Layout



**VisionQuest supports the decision processes of**

- **Exploration**
- **Distillation and synthesis**
- **Evaluation**
- **Prioritization**
- **Allocation of scarce resources**
- **Documentation**

**Meetings can be held without regard to time or place**

# Empirical Data

## Implementing Electronic Meeting Systems at IBM: Lessons Learned and Success Factors Grohowski, McGoff, Vogel, Martz, Nunamaker

- Number of person-hours per session declined 56%
- Total number of person-hours declined 62%
- Calendar time for a project was reduced
- Number of meetings necessary to complete project declined
- Automated group hour equals 2.61 manual group hours

## **Typical reactions from participants**

- **"Wow, we accomplished a lot!"**
- **"Wow, we were surprised about what other people were thinking!"**
- **"We just never would have thought about that!"**
- **"Gee, it is nice to have a complete record of meeting events to carry with us."**
- **"Unbelievable how fast the time passed!"**
- **"It's wonderful how this helped us understand how we arrived at a decision."**