Group Decision Support Systems

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Abstract

This talk will look at using conmputers 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

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Premise

- Most business work involves a large amount of group work

- Most group work involves problem solving

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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

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Why business teams at this time?

- Flatter and less bureaucratic organizations

    - Cross functional teams

    - Pace of change

    - Competition

- Quality improvement programs

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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
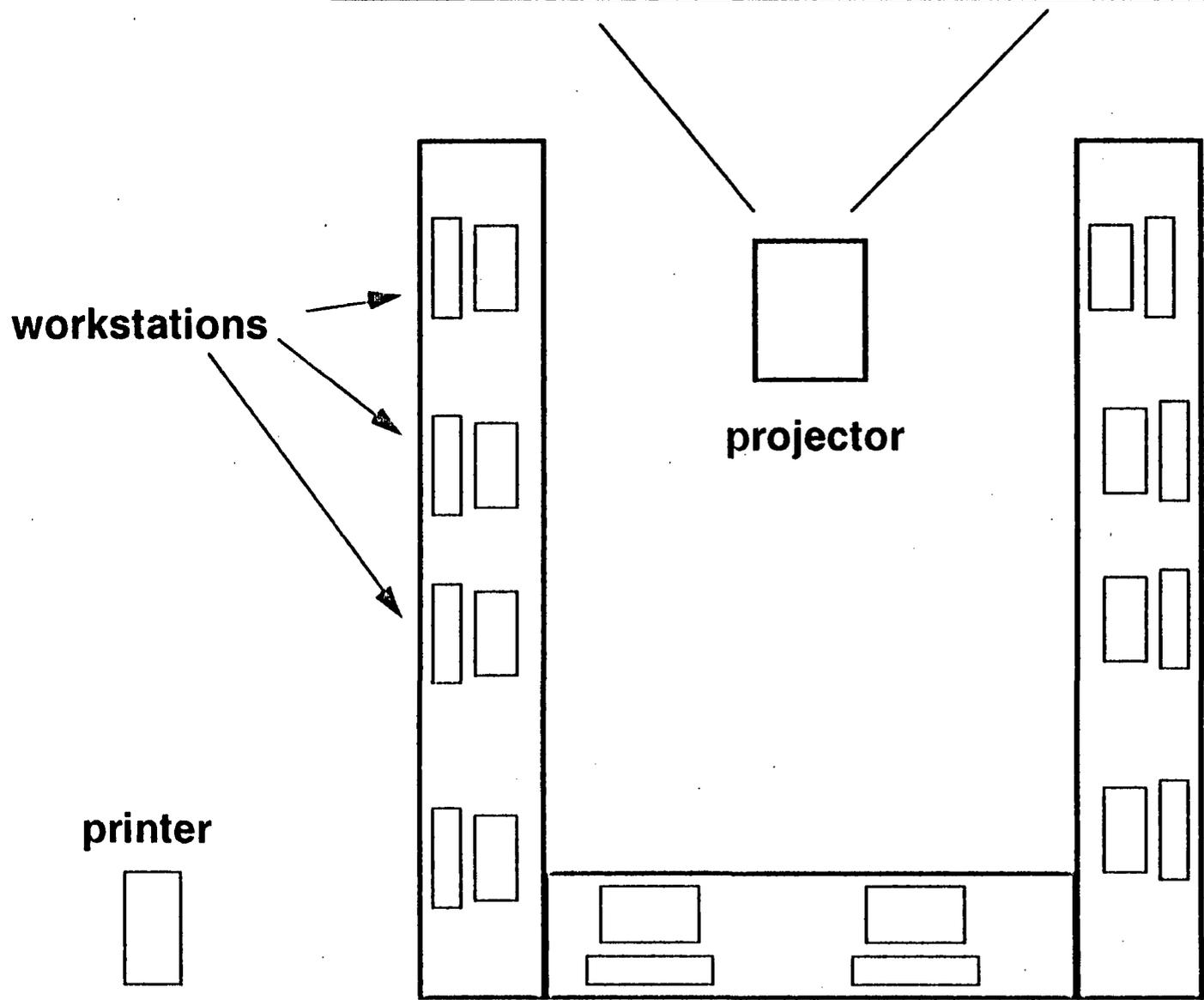   - Continuing attention to the customer

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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

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What are the major areas of Groupware?

- Cooperation

  - Email

  - Notes programs and bulletin boards

- Collaboration

  - VisionQuest from CTC

- Coordination

  - Cooperation from NCR

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Meeting Room Layout

workstations

projector

printer

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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

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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

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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."

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