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# Technical knowledge growth and sharing: approaches and their peculiarities

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# Training strategy

## Building Competence

Quality Management System

Role-based Training

Training Center

## Building Technical Expertise

Technical Seminars

Quality League

Virtual Technical Teams

## Building Communication

Technical Seminars

Conferences

# Building Technical Expertise

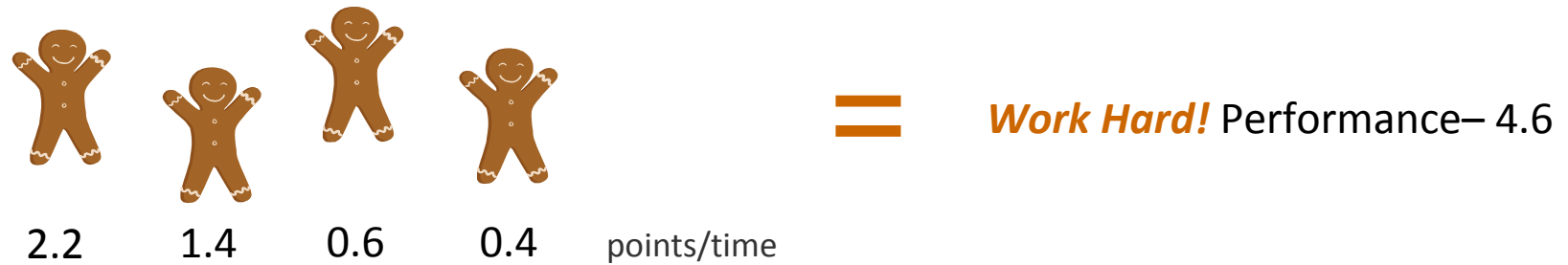
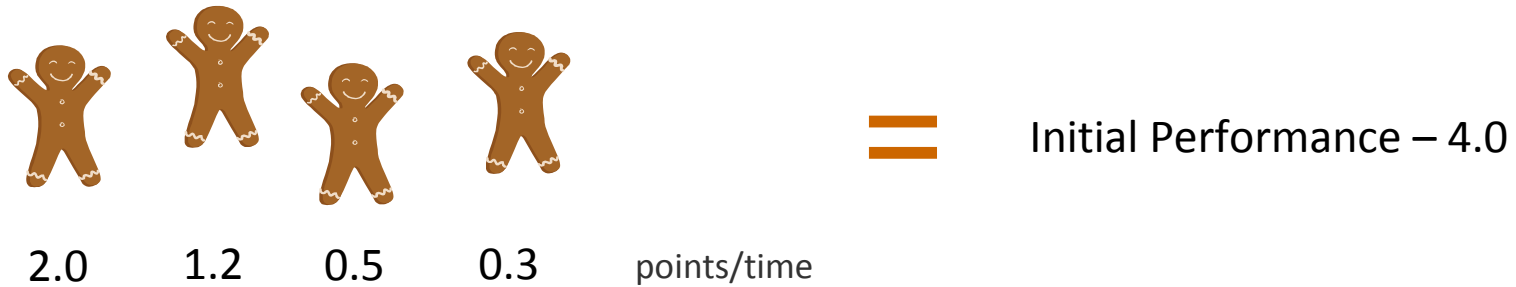
- Cycle time reduction for a team or person to become effective
- Improve code quality
- To be inline with technical progress or even ahead
- Time-to-Market

# Our Approach

- Academic approach to education
- Technical experts = *Guru*
  - Experts are grown for one program and involved into several projects
  - Range of technical trainings are done by experts and delivered to others
  - Code and design review with experts
- Self-education is welcomed
- Regular Technical Seminars
  - education for newcomers
  - knowledge sharing
  - out of center technology knowledge sharing

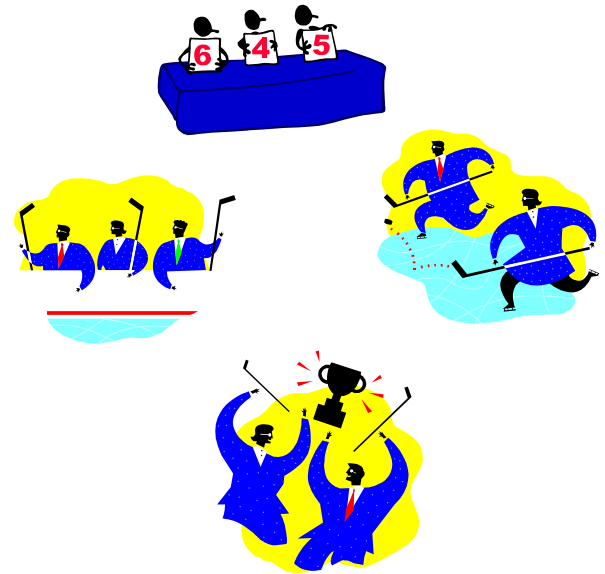


# Work or Share?



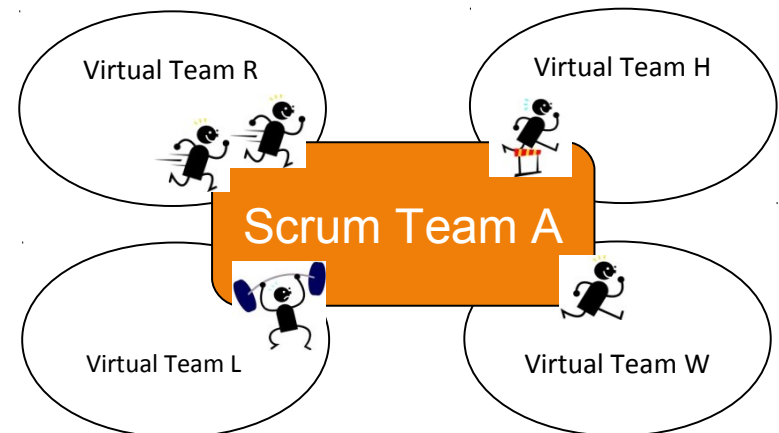
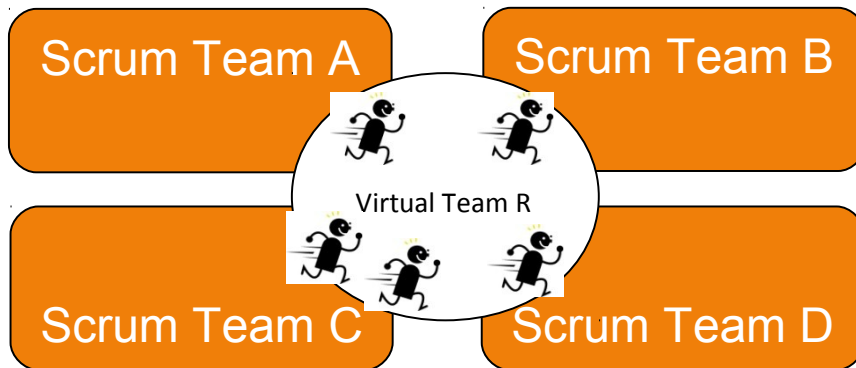
# Quality League

- Worked for India
  - Group focused
  - Creativity
  - Positive to experiments
  - Constant work improvement
- Approach:
  - Moto *“Learning with FUN!”*
  - Pre-QL: Cross-teams prepared quizzes based on the current work
  - QL: Review competition among teams
  - Point system
  - Winners were announced and awarded
  - Works greatly within one program with the same area of knowledge



# Virtual Technical Teams

- Worked for China:
  - Discipline
  - Team spirit
  - Solidarity
- Challenges:
  - High rotation
  - Requirement to teams to know well the whole platform they work on
- Approach
  - 5~6 volunteers from different teams
  - One Virtual team - one major knowledge area
  - One engineer attends only one virtual team
  - Each team has experts in most of areas
  - Virtual Team focus keeps fixed for a long time
  - First priority: development team tasks
  - Second priority: Virtual team task
  - Regular Virtual team meetings
  - Effective only in one area of knowledge



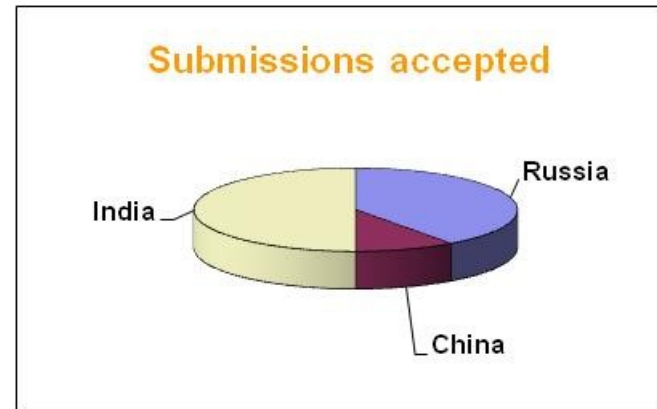
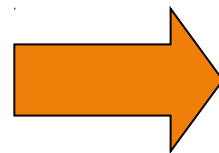
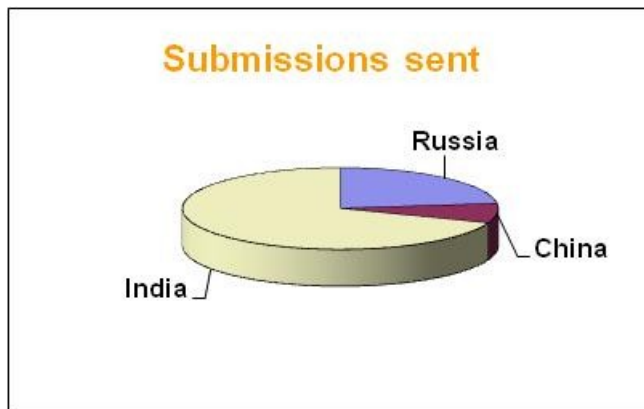
# Building Communication

- We wanted:
  - Provide an event for technology experience sharing
  - Make the event interesting and useful
  - High rate of participation and attendance
  - Not to invent something new
- Best Practices
  - Re-use of Technology Day approach
  - Similar to small conference
  - For one business and close technologies



# Best Practices. Presentation submission

- Russia: *few submissions*
  - valuable and what are worth presenting
- India: *lots of submissions*
  - mostly obvious technologies that are common for all
- China: *fewer submissions than by Russia*
  - mostly valuable



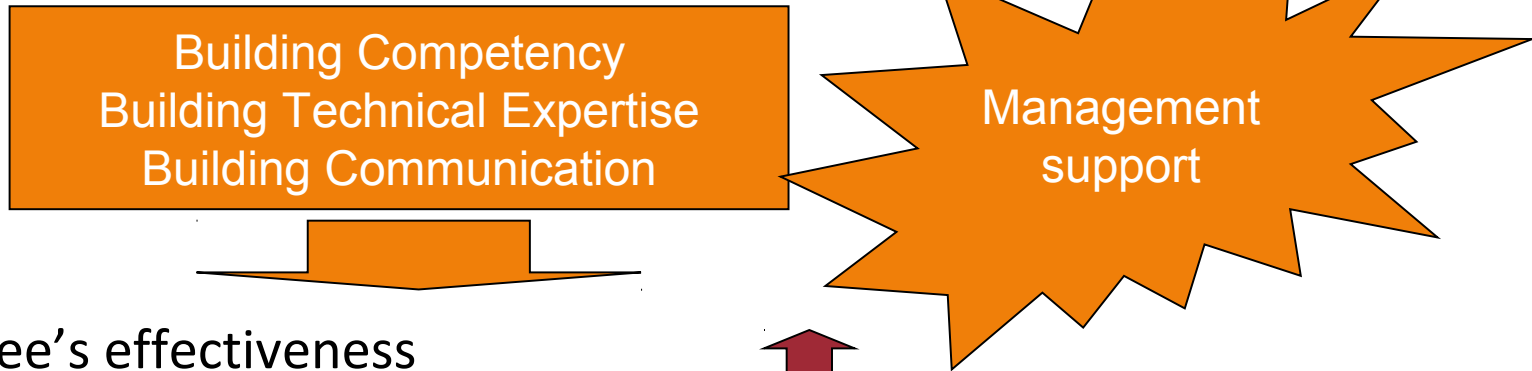
# Best Practices. Selection procedure

- How to make it independent?
  - at least 2 reviewers
  - location-independent reviewers
  - checklist with the same criteria
  - additional experts when ratings differs significantly
- How to select interesting presentations?
  - criteria for ratings with factors impacting presentation attractiveness
  - reviewers assigned according to their expertise
  - additional review round for similar ratings

# Best practices. Results

- High rate of presentation submission
- Selection procedure helped in attracting attention and interest
- Most of winning presentations were from India Center
- All presentations are available for reference
- Instances of technologies, approaches and tools re-usage in other centers

# Summary



Employee's effectiveness



Adaptation cycle time



Product quality



Team morale



Awareness of other teams' activities



Thank You!  
Q&A