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Action Research

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Outline

- Definition & Characteristics
- AR Planning & Performing
- AR Evaluation
- Development
- Usage in IS & computing
- Advantages & Disadvantages
- Discussion

Definition & Characteristics

Action research *is a research initiated to solve an immediate problem […] led by individuals working with others in teams or as part of a "community of practice" to improve the way they […] solve problems.*

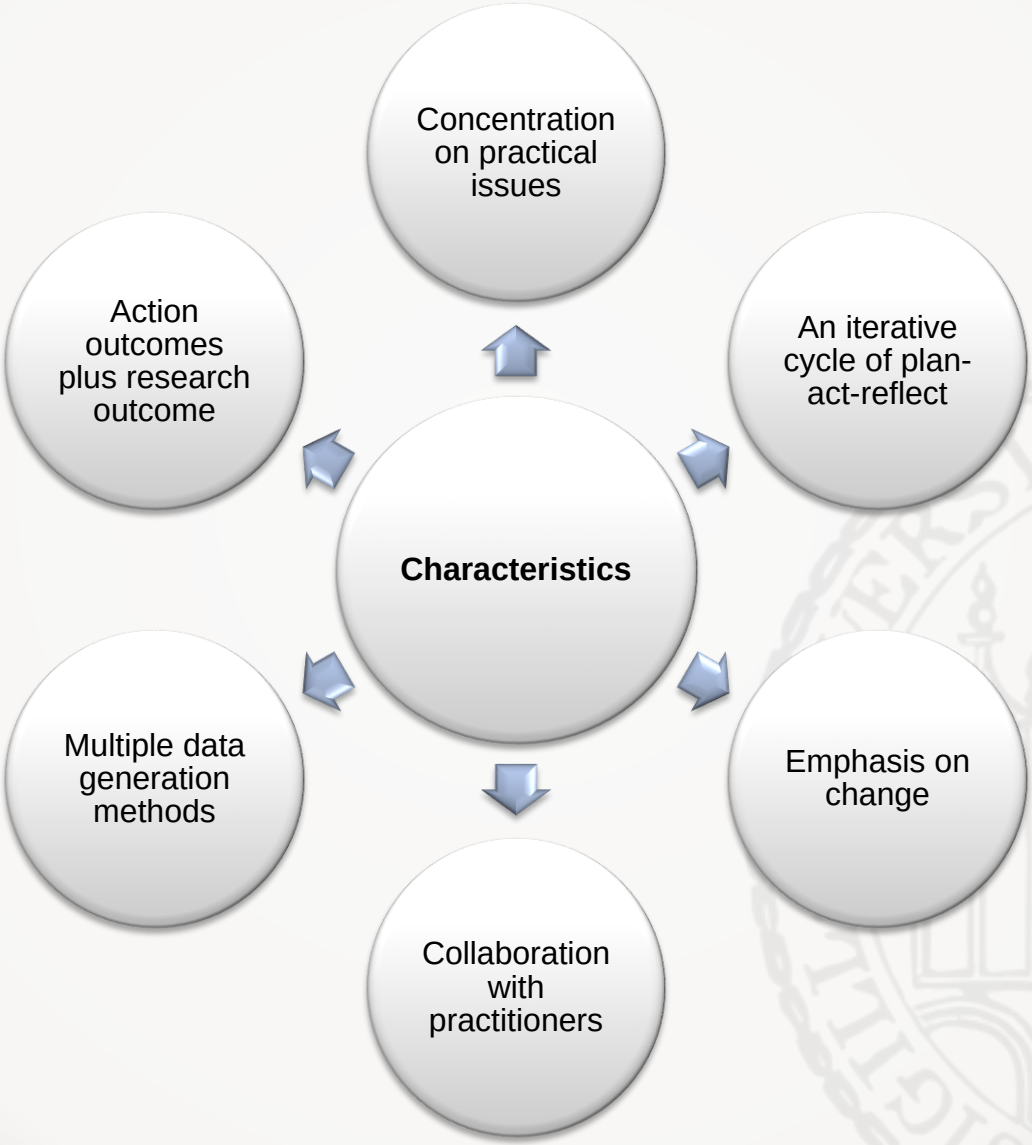
(Wikipedia)

Definition & Characteristics

History

- 1940s - 50s: Lewin (USA)
- 1950s - 60s: Tavistock Institute (UK)

Definition & Characteristics



Definition & Characteristics

Action Research vs. Consultancy

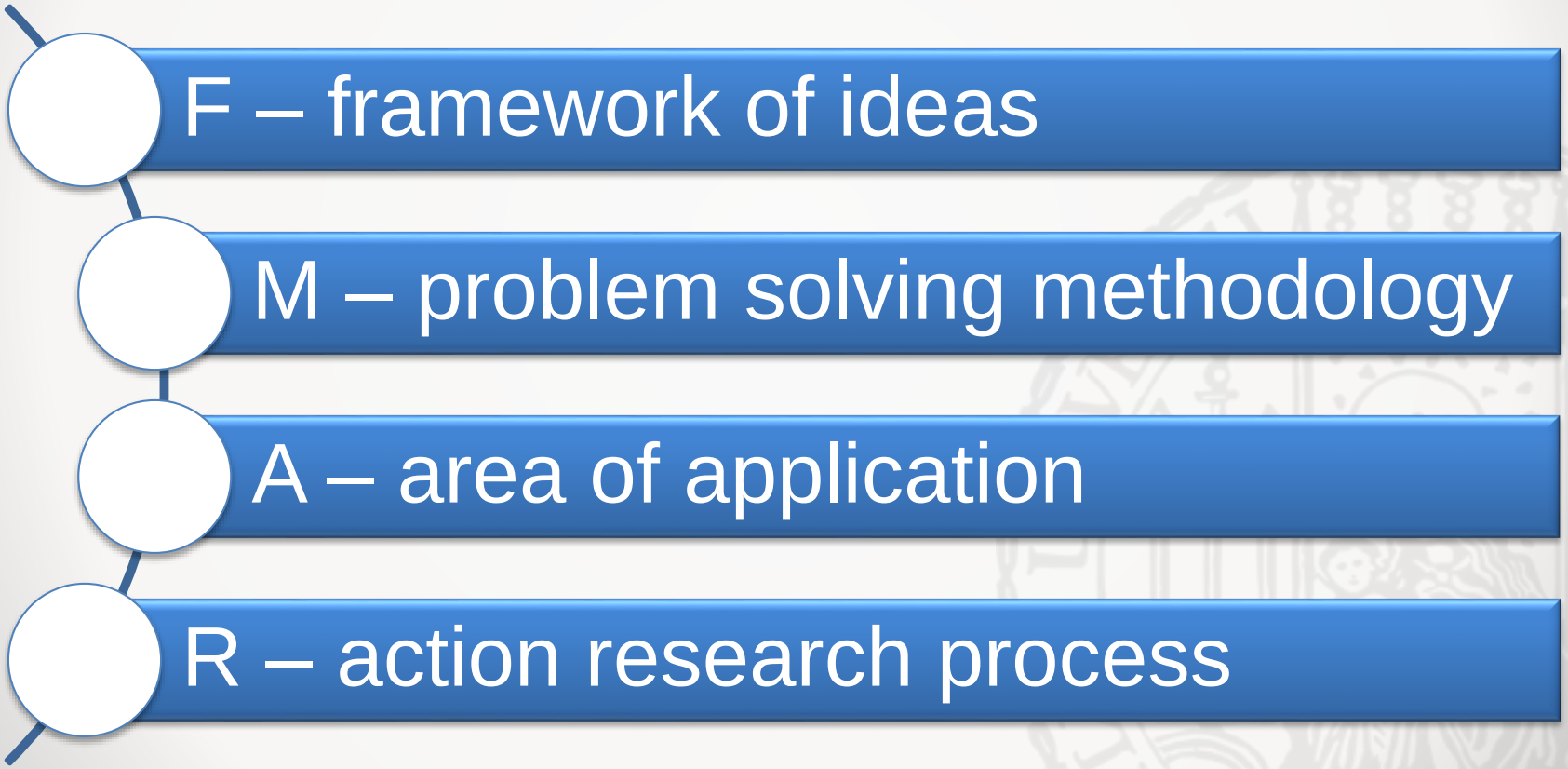
- More vs. less required documentation
- Theoretical vs. empirical justifications
- Cyclical vs. linear process
- Different time and budget constraints

Planning & Performing

- Outline
  - FMA(R)
  - Research Process
  - Research Protocol
  - Participation
  - Self-delusion & Group-thinking
  - Outcomes & Generalization

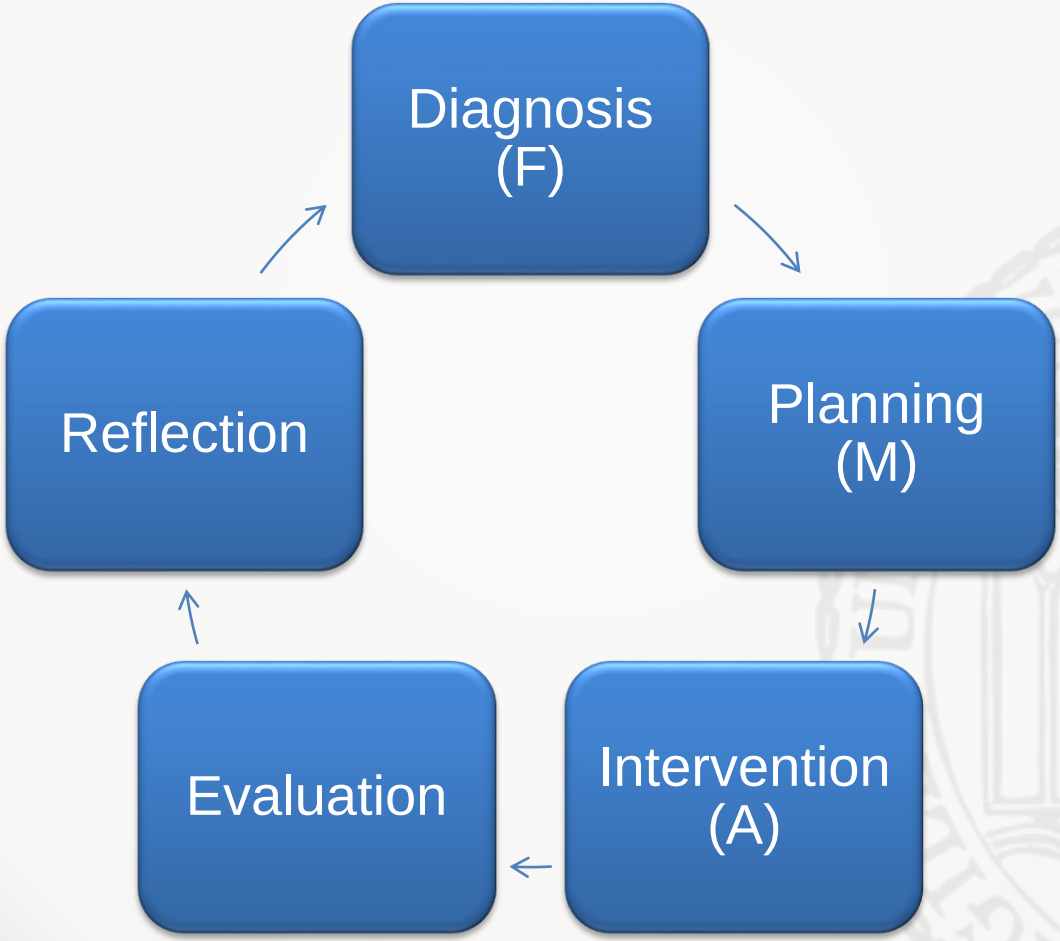
Planning & Performing

- F, M, A, (R)



Planning & Performing

- Research Process (plan-act-reflect)



Planning & Performing

- Research Protocol

Content:

- The objectives of the project
- How will it be evaluated
- The roles and responsibilities of all participants
- Organizational constraints

Involvement:

- Collaborative
- Facilitative
- Expert

Planning & Performing

- Participation

- Goal: full participation by all affected
- Reality: professional-client relationship

Important in AR:

- The degree of involvement of those affected
- Political relationships between the participants
- Any constraints on the free exchange of views and hence on the claimed outcomes

Planning & Performing

- Self-delusion & group-thinking

Self-delusion

- If researchers work alone, they should explain what steps were taken to avoid self-delusion
- use fellow academics to challenge any assumptions and assertions

Group-thinking

- Devils advocate procedure:
  - a theory does not apply
  - A method is not working
  - An evaluation lacks on empirical evidence

Planning & Performing

- Outcomes

Action	Research

• Practical achievements in the problem situation
• Include:
  • Improved efficiency
  • Greater effectiveness
  • Enhanced communication
	• Theoretical achievements
	• Learning about the processes of problem-solving and acting in a situation
	• Confirm/ modify/ reject existing theories, or build new ones

Planning & Performing

- Generalizations

Do not:

- make any generalizations from one action research study that might have unique features

Do:

- reflect and think if your outcomes are applicable elsewhere
- give sufficient information about the problem for readers

Evaluation

Easy 10 step Evaluation Guide:

1. The plan-act-reflect cycle
2. Explicit F, M and A
3. Data generation
4. Extent of participation
5. Self-delusion and group-think
6. Outcomes and generalization
7. New action research
8. Limitations of the AR
9. Flaws and omissions
10. Efficiency of the AR strategy

Development

“New Action Research” Definitions:

Action research aims to contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework.

(Rapoport, 1970, p. 499)

A general term to refer to research methodologies and projects where the researcher(s) tries to directly improve the participating organization(s) and, at the same time, to generate scientific knowledge.

(Kock, 1997)

Development

Relational Praxis

Everyday world consists of

- Relationships, co-creation and participation

Removal of distinctions

- Researcher-subject
- Academic-practitioner

Research is undertaken

- With, for and by people

Focusing on

- Information society
- Digital divide
- Community informatics
- E-democracy

Development

Reflexive-practical outcome

Technical

- Functional improvements
- Majority of action research projects

Practical

- Functional improvements
- Reflection and understanding
- Self-educational

Emancipatory

- Functional improvements
- Self-understanding
- Evaluate social or organizational context
- Empowers participants to overcome social barriers

Development

Plurality of knowing

Experimental

- Empathy
- Intuition
- Feeling

Presentational (emerges from experimental)

- Stories
- Drawings
- Music

Propositional

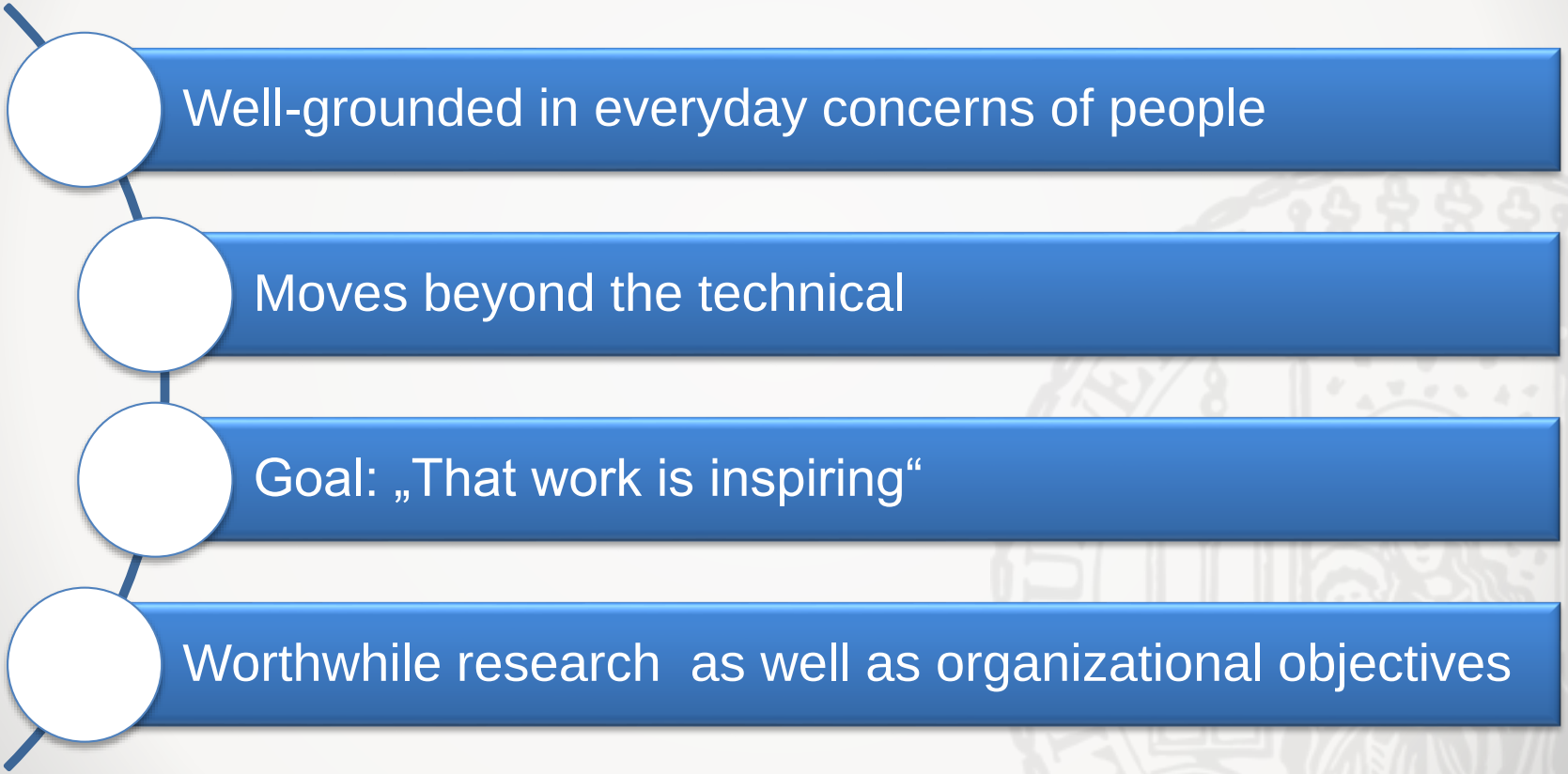
- Logical and organized ideas and theories

Practical

- Ability to exercise a skill

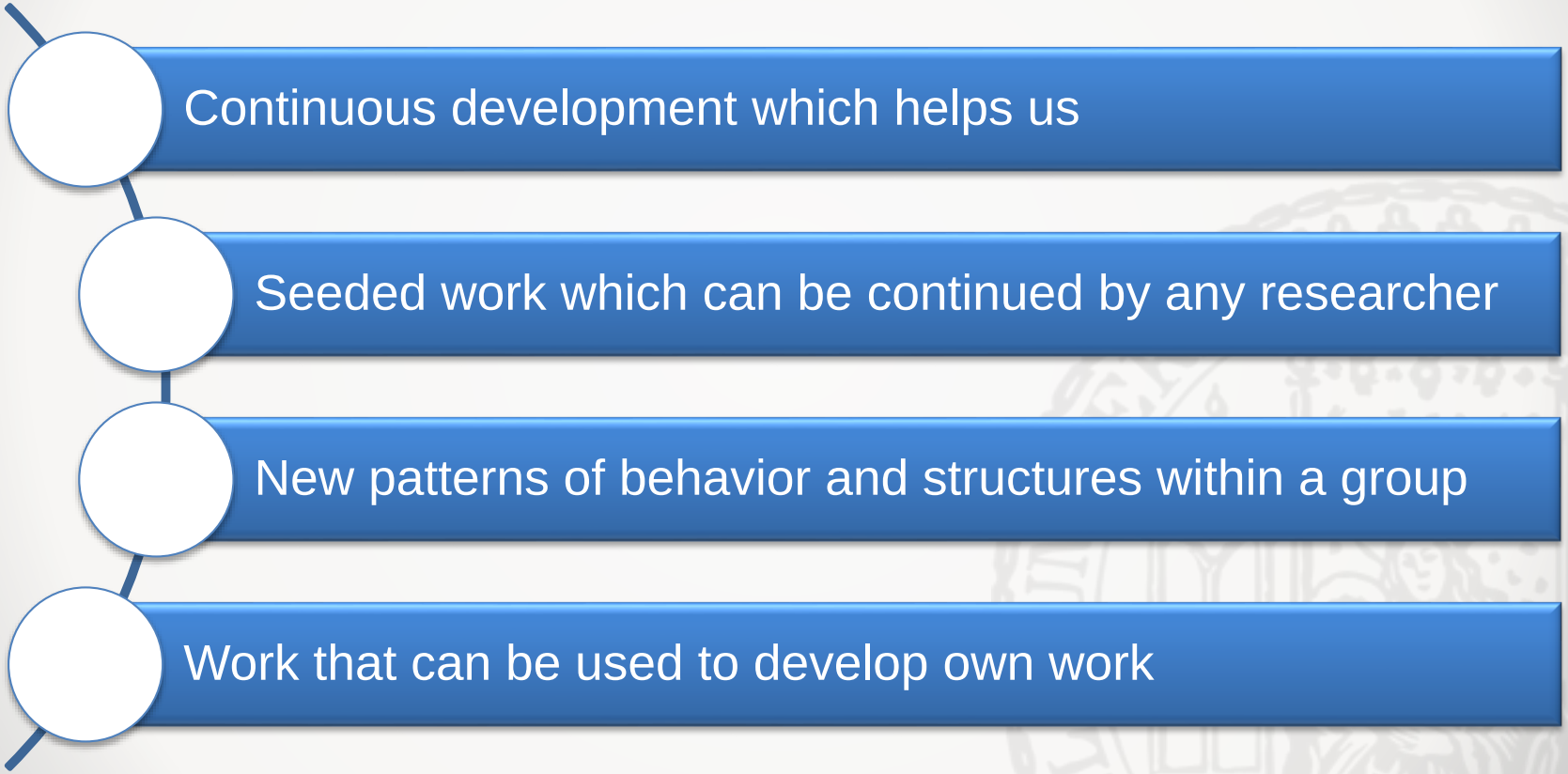
Development

Significant work



Development

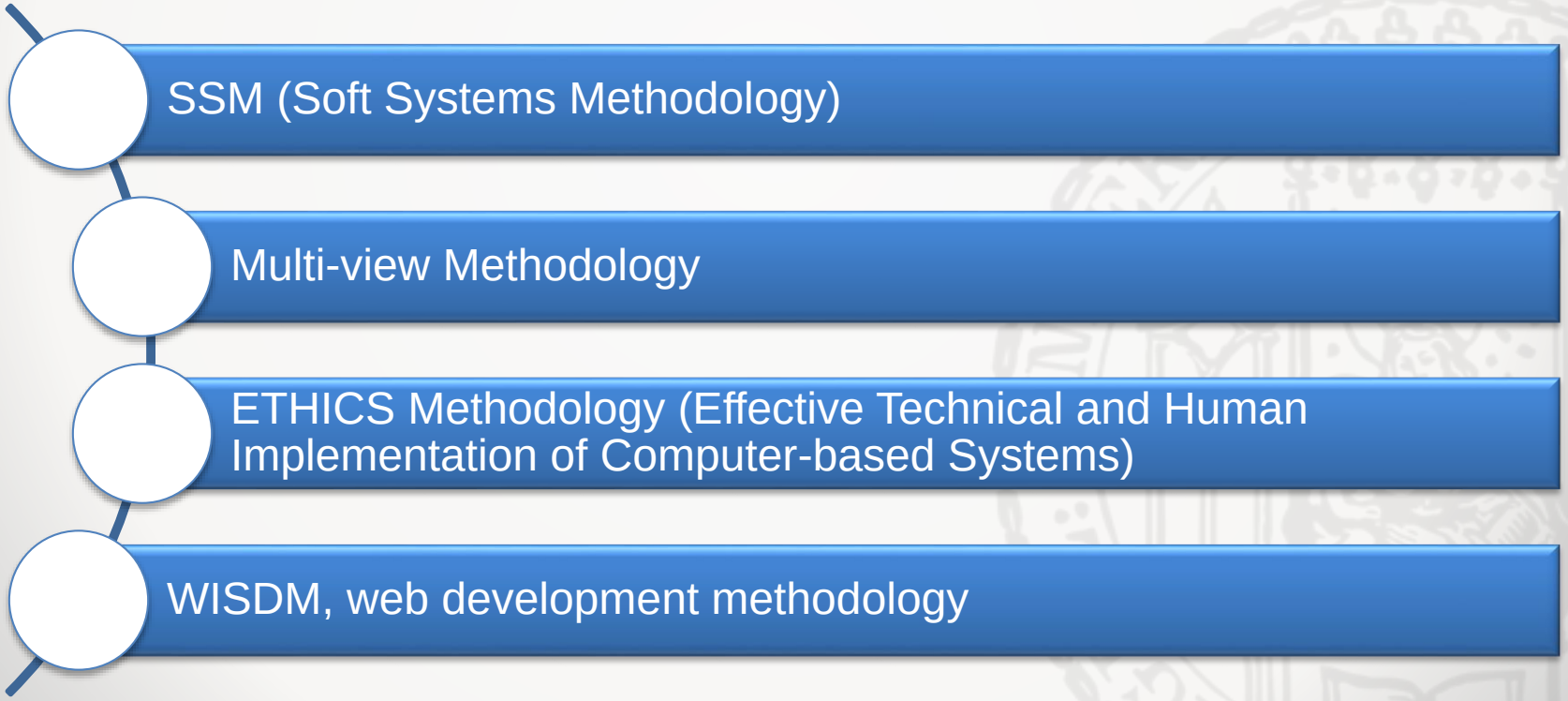
Enduring consequences and infrastructure



Bradbury and Reason (2001)

Usage in IS & computing

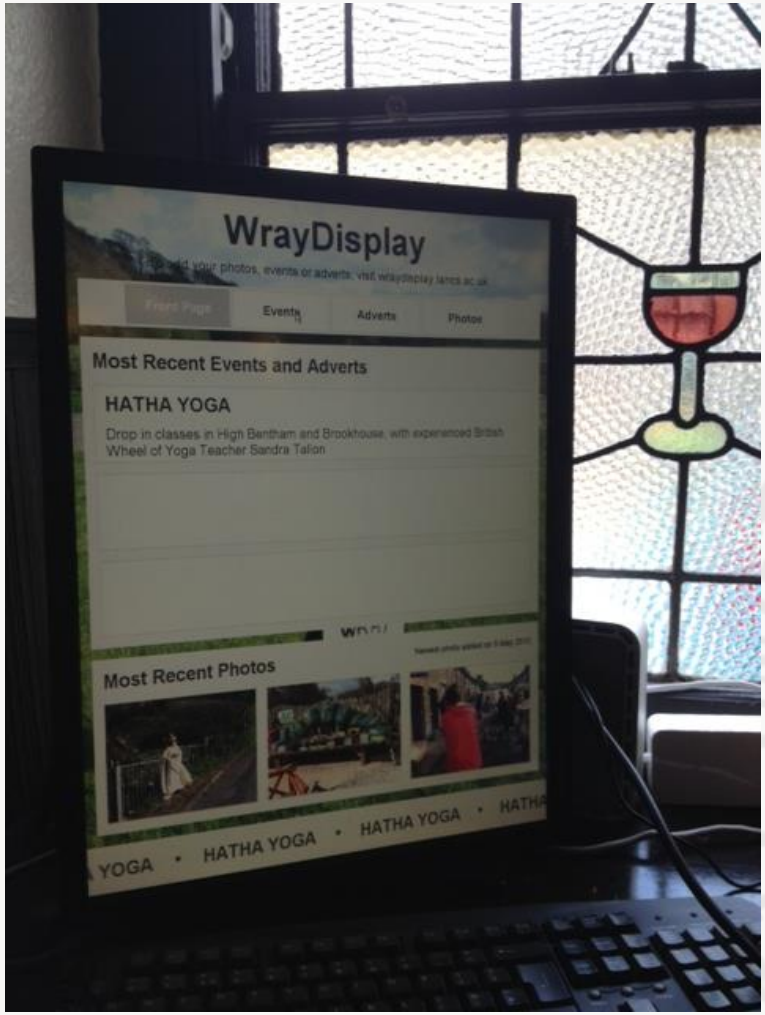
- Used in exploration of better system development methods or methodologies
- Examples:



Usage in IS & computing

- Wray Photo Display
  - Taylor and Cheverst
  - Public display for community-generated photography
  - use of photos and how public display technology may support these interactions
  - After 2 years over 1000 uploads
  - Positive feedback

Usage in IS & computing



http://thesharcproject.files.wordpress.com/2013/07/wray.jpg?w=225&h=300

Advantages & …

- Relevant to people in the real world
- Linkage between academic and everyday world
- Suited to systems development and problem-solving methods
- Can create greater appreciation of all types of knowledge
- Change peoples' life and improve social justice

… Disadvantages

- Unknown and unaccepted by many computing researchers
- Cause, effect, outcomes maybe not generalizable
- Sometimes confusion with consultancy
- Unsuited for people unwilling to work democratically
- Difficult to meet the needs and expectations of everyone

Take Home Message

- Produce practical and research outcome
- Prepare the iterative Plan-act-reflect process
- Let the practitioners participate
- Remove the researcher-subject distinction
- Do significant work

Discussion

Action now. Let‘s talk!

References

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