



Manajemen Sistem Informasi

Oleh

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**MANAGEMENT
INFORMATION SYSTEMS**



Literature

**Harver, A. R., March, S. T., Park, P., & Ram, S. (2004).
Design Science In Information Systems Research.
MIS Quarterly, 25(1), 75-105.**

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Measuring Information Systems

Paradigms

➤ **Behavior science approach**

- **Seeks to develop and verify theories that explain or predict human or organizational behavior.**

➤ **Design science approach**

- **Seeks to extend the boundaries of human and organizational capabilities by creating new and innovative artifacts.**
- **In design science paradigms, knowledge and understanding of a problem domain and its solution are achieved in the building and application of the designed artifacts.**

Behavior science approach

- ***It seeks to develop and justify theories (i.e. principle and laws) that explain or predict organizational and human phenomena surrounding the analysis, implementation, management, and use of information systems.***

Behavior science approach

- ***People, technology and organizational that must be manage if an information systems is to achieved its stated purpose (improving the effectiveness and efficiency of an organization).***

Behavior science approach

- *Seek to predict the artifacts use (intention to use). Perceived usefulness, and impact on individuals and organizations (net benefit) depending on system, service, and information quality.*
- *Focused on evaluating models*

Design science approach

- ***Design science paradigm has its root in engineering and the science of the artificial, its fundamentally a problem solving paradigm.***

Design science approach

- ***It seeks to create innovations that define the ideas, practices, technical capabilities, and products through which the analysis, design, implementation, management, and uses of information systems can be effectively and efficiently***

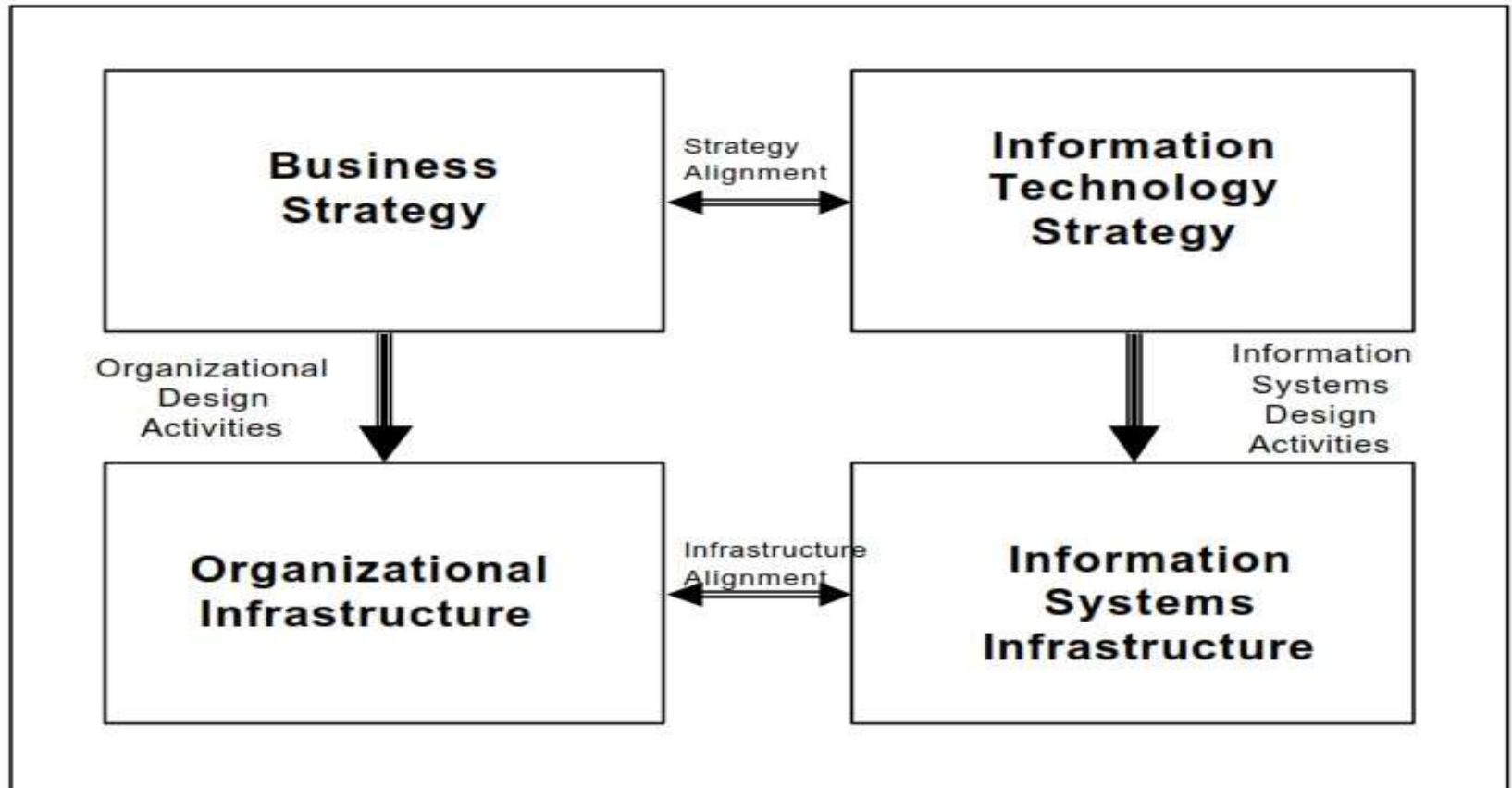
Design science approach

- ***Design science paradigms aimed at developing executive information systems and system support emmerging knowledge processes.***
- ***Effective development practices (methods) and a type of system solution (instantiation) for particular class of user requirements (models).***

Design science approach

- ***Such artifacts are represented in structure form that may vary from software, formal logic, and rigorous mathematics to informal natural language.***

Organizational Design and Information Systems Design Activities



Complementary science approach

- ***Technology and behavior inseparable.***
- ***Behavior paradigms argue that truth (justified theory)***
- ***Design paradigms argue that utility (artifacts that are effective).***
- ***The realm of Information Systems is People, Org, Techno.***

Complementary science approach

- ***IT artifacts defined as constructs (vocabulary and symbols), models (abstraction and representations) , methods (algorithms and practices), and instantiations (implemented and prototype systems).***

Complementary science approach

- ***BSP addresses the development and justification of theories that explain or predict phenomena related to the identified business need.***
- ***DSP addresses the building and evaluation of artifacts designed to meet the identified business need.***



inspired by knowledge

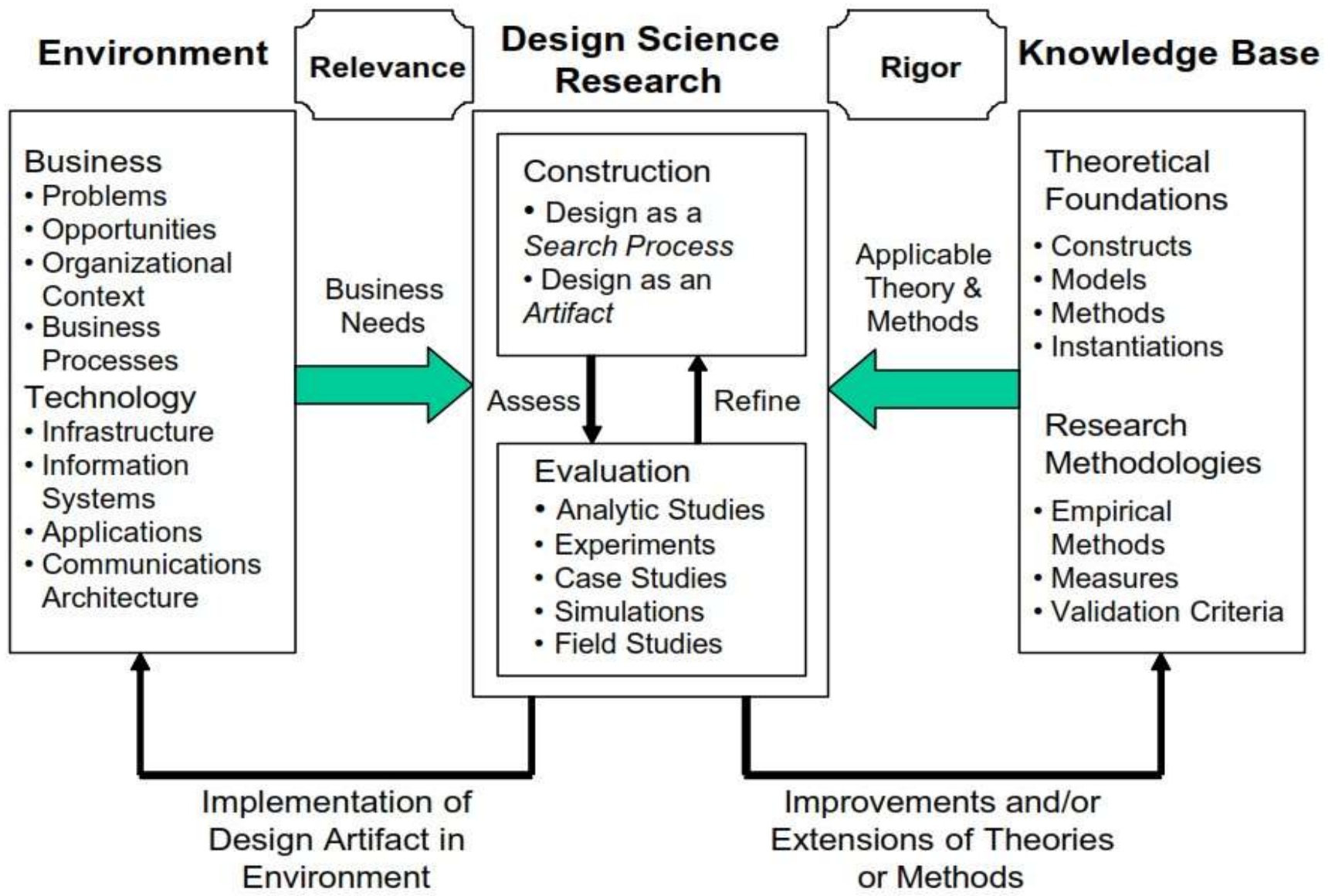
Complementary science approach

- ***The goal of BSP is truth (principled explanations of phenomena).***
- ***The goal DSP is utility.***
- ***That truth and utility are inseparable, truth informs design and utility informs theory.***

Complementary science approach

- An artifacts may have utility because of some as yet undercover truth.***
- A Theory may yet to be developed to the point where its truth can incorporated into design.***
- The result evaluate activities can result in the identification of weaknesses un the theory or artifacts and need to refine and reassess.***

Framework



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