Quality Models in eSourcing:
The Effect of Knowledge Transfer Factors on Assimilation
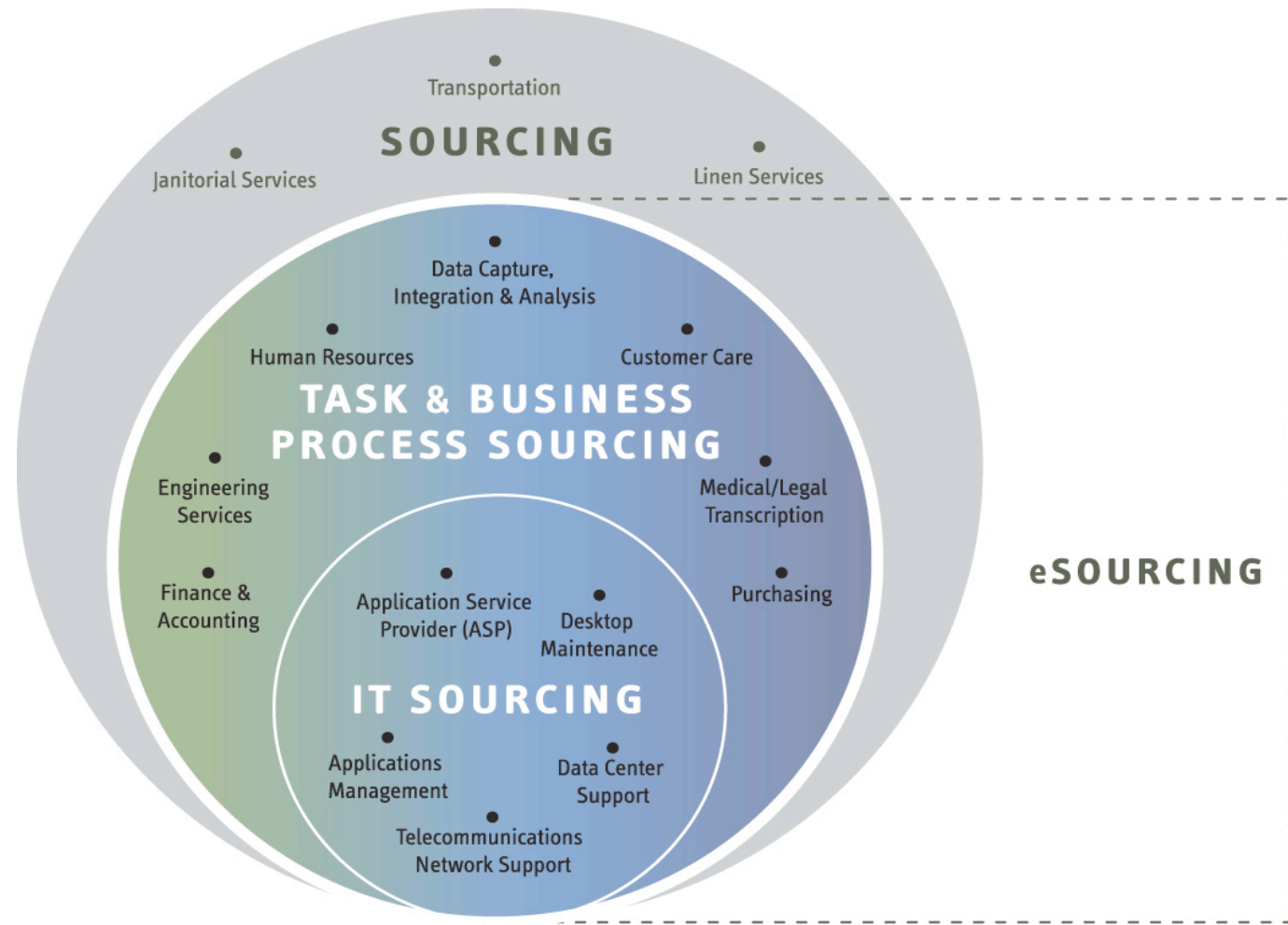
Sandra Slaughter, Bryon Balint, and Chris Forman
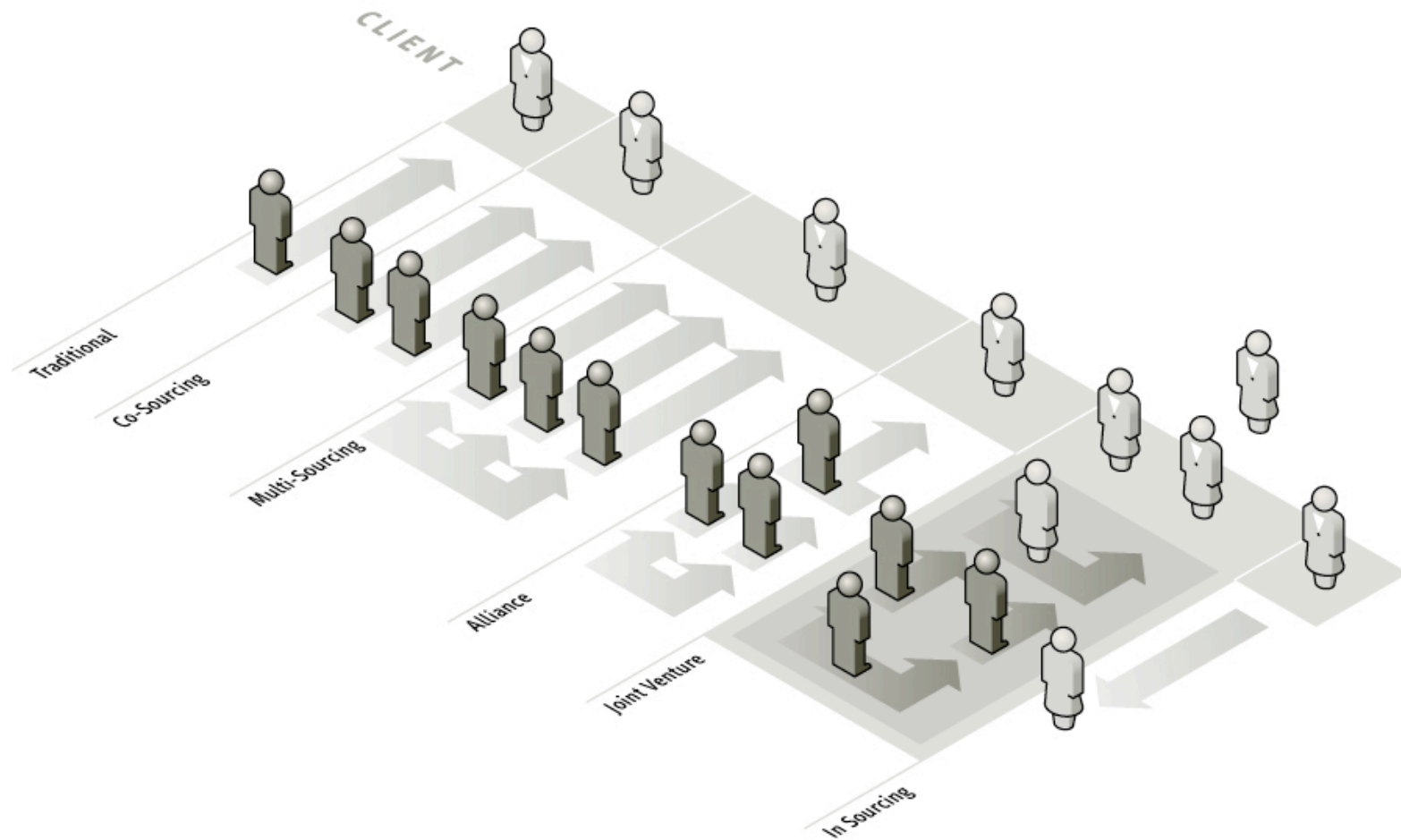Tepper School of Business, Carnegie Mellon University

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What is eSourcing?

Types of eSourcing relationships

Research Motivation

Sourcing relationships are often fraught with problems due to poor service definition, poor management, etc.

Capability models can provide a common set of best practices, methods or technologies for service delivery, improving performance

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Why Best Practice Frameworks?

"Best" practice – a "good" management or technical practice consistently demonstrated to significantly improve the bottom line.

Best practice frameworks – models and standards comprised of generally accepted best practices.

Best practices are usually considered universally applicable.

Research Motivation

However, the adoption of best practice frameworks presents significant costs to firms

 Initial adoption

 Assimilation into everyday use

Research Questions

What factors influence knowledge transfer during the assimilation of an eSourcing capability model?

How does the transfer of knowledge affect the timeliness of the assimilation of an eSourcing capability model?

How do the outcomes from one assimilation stage affect the outcomes of a subsequent stage?

Summary of Key Findings

Implementation times were reduced when:

- Team members were more experienced
- Personnel rotated across teams
- Practices were compatible with existing methodologies like CMMI or SW-CMM

Knowledge transfer characteristics directly affected initial implementation times but not likelihood of full model assimilation

Practices with high and low implementation times were more likely to receive an initial "Satisfied" assessment

Knowledge Transfer and Assimilation

Organizations must overcome initial knowledge barriers before they will adopt innovations (Attewell, 1992)

Knowledge that is transferred must be learned and applied to be effective (Ko et al, 2005)

As organizations learn more, they will more fully assimilate innovations into everyday use (Fichman & Kemerer, 1997)

Knowledge Transfer Framework (Szulansky 1996)

Characteristics of Knowledge
> Explicitness / Complexity

Characteristics of Source
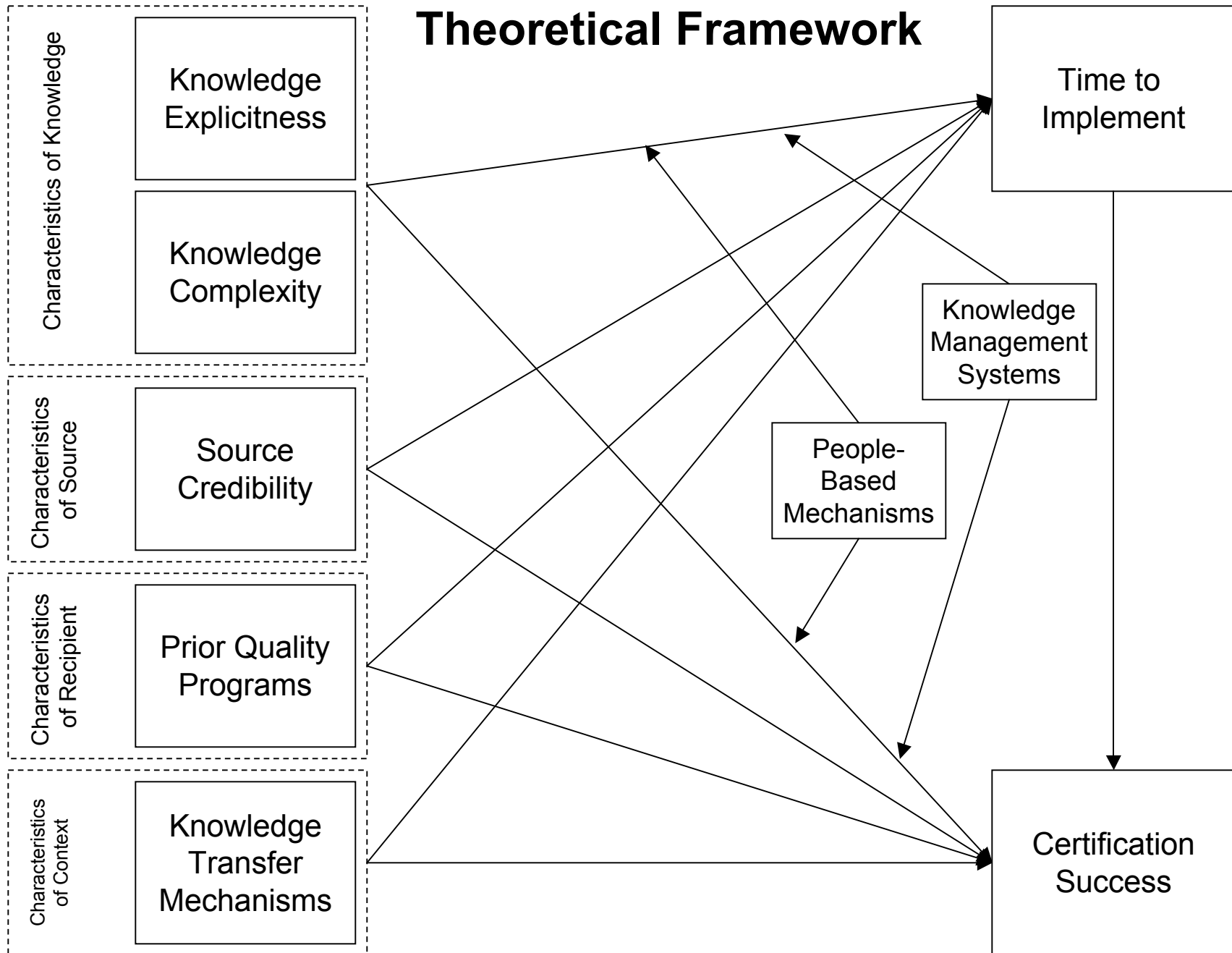> Perceived competence based on experience

Characteristics of Recipient
> Prior experience with quality programs

Characteristics of Context
> Mechanisms: Personnel Transfer, Knowledge Management Systems

Theoretical Framework

Characteristics of Knowledge
- Knowledge Explicitness
- Knowledge Complexity

Characteristics of Source
- Source Credibility

Characteristics of Recipient
- Prior Quality Programs

Characteristics of Context
- Knowledge Transfer Mechanisms

Time to Implement

Knowledge Management Systems

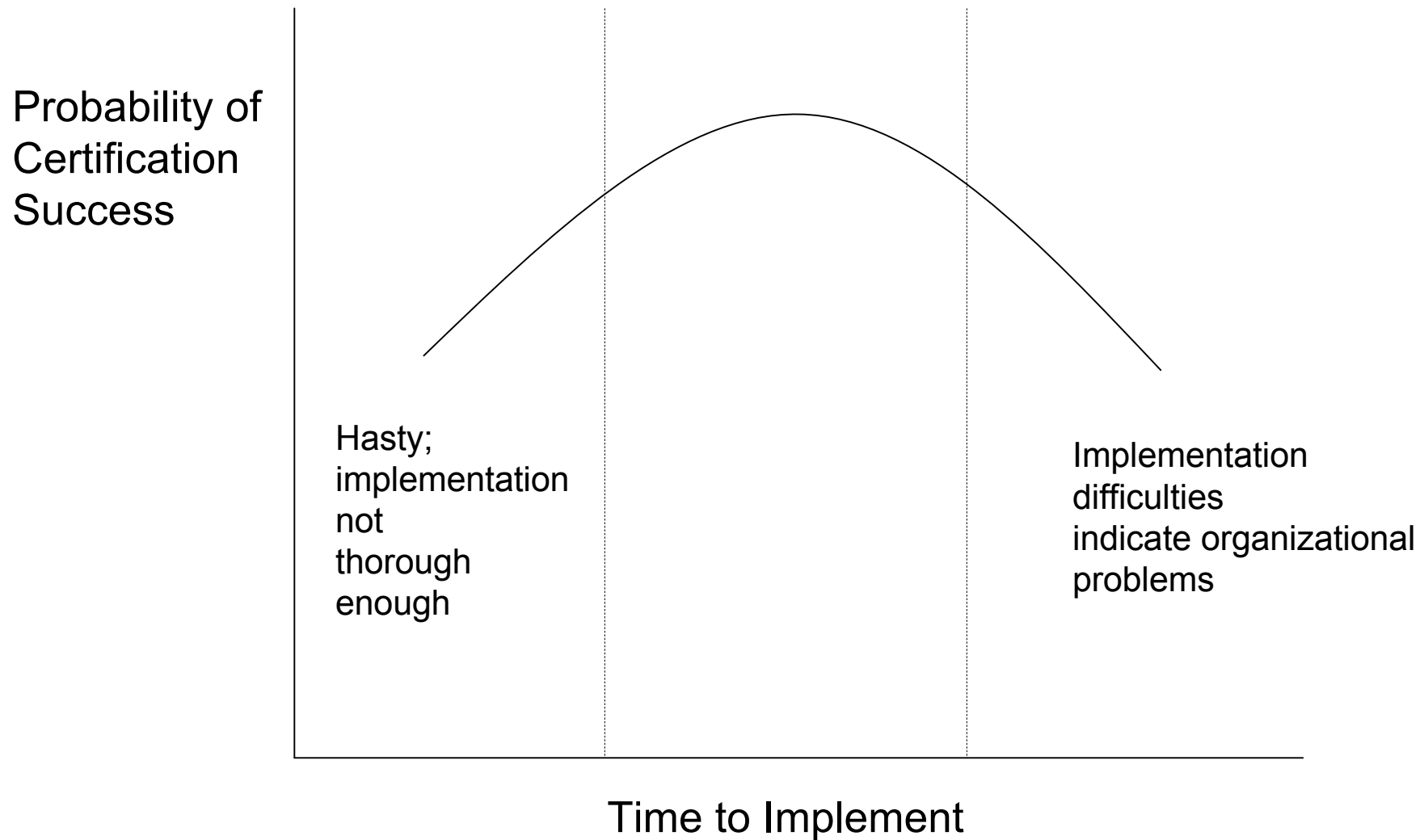People-Based Mechanisms

Certification Success

Assimilation Stages

There are different stages of assimilation (e.g., Cooper & Zmud 1990)

Little existing research examines the transitions between stages <u>within an organization</u> and the influence that one stage may have on a subsequent one

Hypothesized Relationship Between Assimilation Stages

Probability of Certification Success

Hasty; implementation not thorough enough

Implementation difficulties indicate organizational problems

Time to Implement

Research Setting
A major eSourcing Service Provider

Global management consulting, technology services and outsourcing company

Earned more than U.S. $16 billion net revenues in 2006

Employs almost 150,000 employees in 50 countries

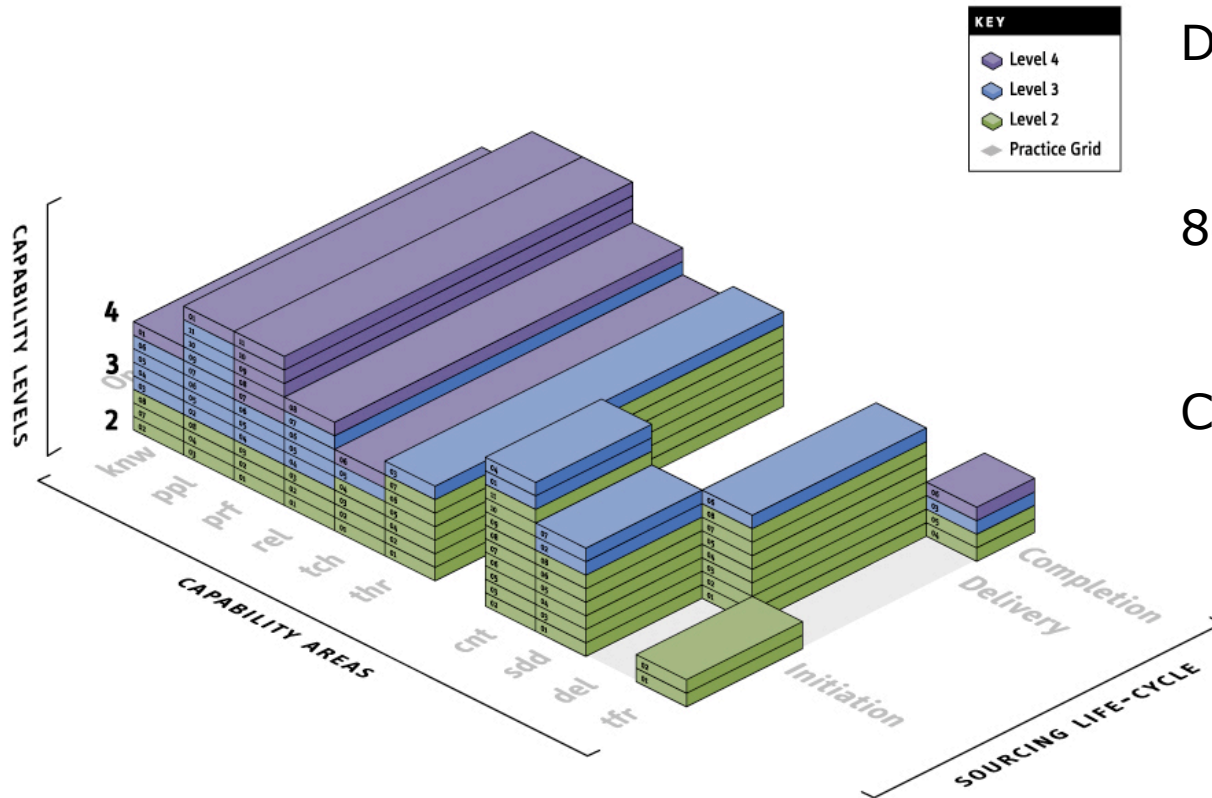Covers more than 30 industries and 75 countries

Research Context
Service Provider Implemented an eSourcing Capability Model

eSourcing Capability Model for Service Providers (eSCM-SP)

Developed by Carnegie Mellon University and a consortium of companies

84 best practices associated with IT-enabled sourcing

Covers entire sourcing life-cycle

Research Method, Data and Analysis

Field Study of eSCP-SP implementation:

      74 Separate Practices
      8 implementation teams
      2 implementations (Human Resources, Financial Services)
      Implementations over a 2 year time period

Data:

      Implementation and assessment information by team by practice from project management archives
      Interviews with key informants

Analyses:

      Implementation effort (Linear Regression)
      Probability of Certification (Standard Probit Regression)

Results – Time to Implement

An increase in average team member experience in practice implementation of 5 days reduces average implementation time by 4.4% (Financial Services)

Rotation of implementation resources across teams reduced average implementation times by 73% (Financial Services)

Compatibility with eSCM-SP Practice and SW-CMM or CMMI reduces average practice implementation times by 16.1% (Financial Services)

Teams that shared members for implementation of Practices containing more tacit knowledge reduced average implementation times by 10% (HR)

Counter to expectations, knowledge explicitness and KMS usage slightly increased implementation times

Key Results from Phase 1:
The importance of experience
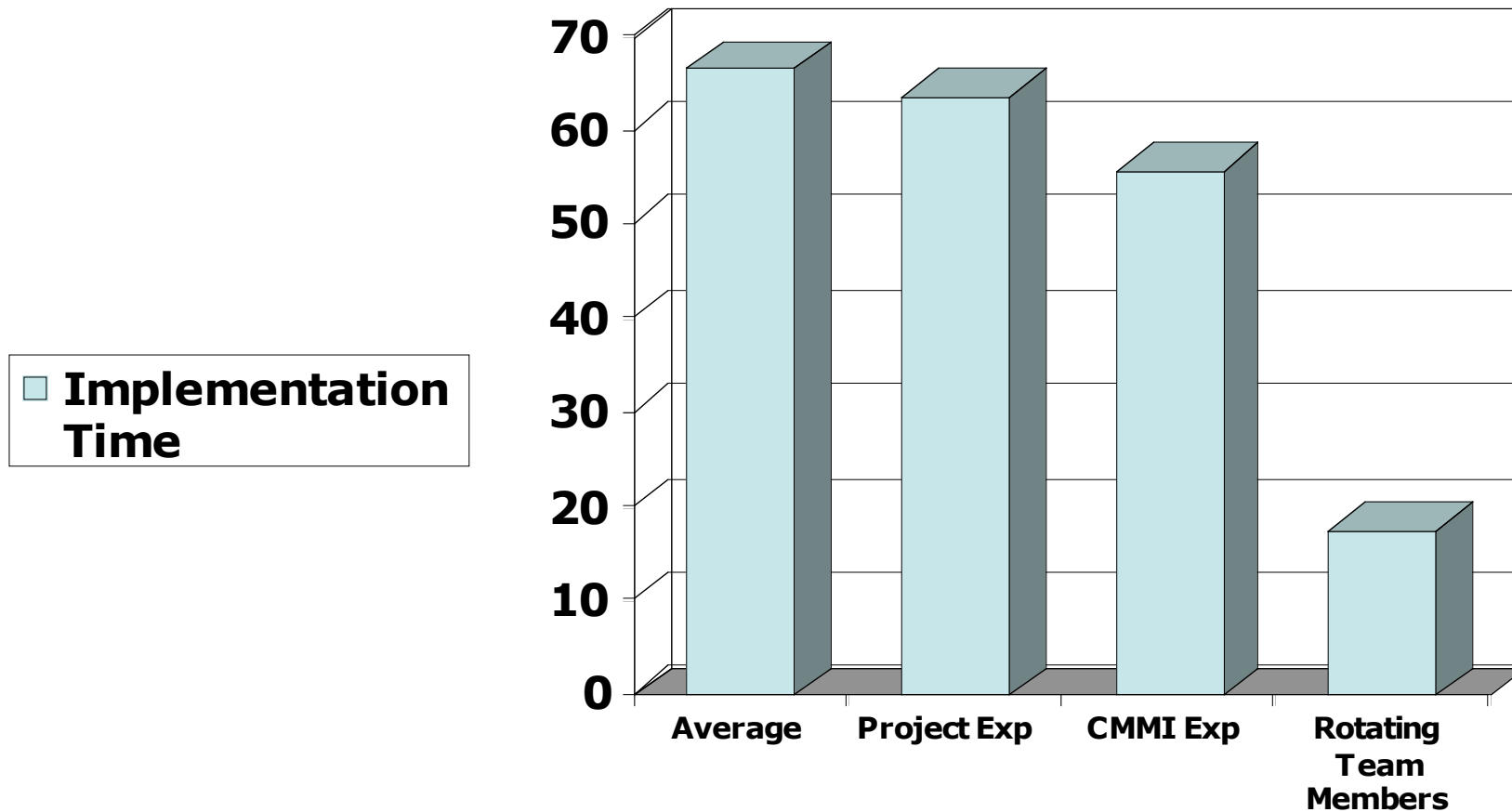
Results - Certification

None of the knowledge management antecedent variables were significantly related to certification outcomes

Mediation check demonstrates that implementation time partially mediates the effect of the other independent variables on certification success

Counterintuitive relationship between implementation time and certification success

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Key Results from Phase 1:

Unexpected relationship between practice implementation time and certification success
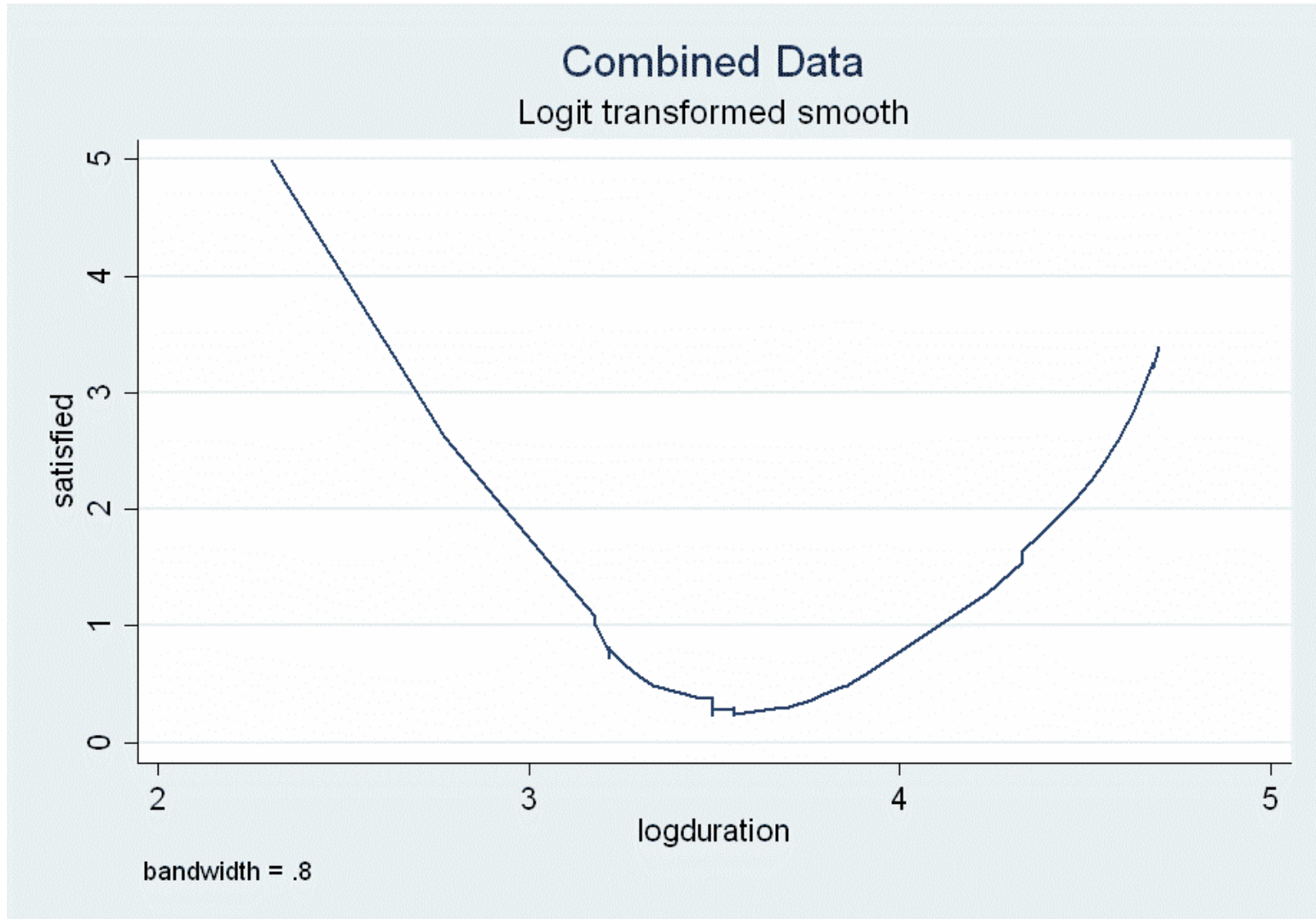
Future Work

Further understanding of differences between Financial Services and Human Resource implementations

Further investigation into relationship between implementation stages

Analyze performance impacts of eSCM-SP adoption in Financial Services and Human Resources