Business Process Management: Concepts, Languages, Architectures

Second Edition

Figures of Chapter 2

Mathias Weske

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Best regards,

Mathias Weske

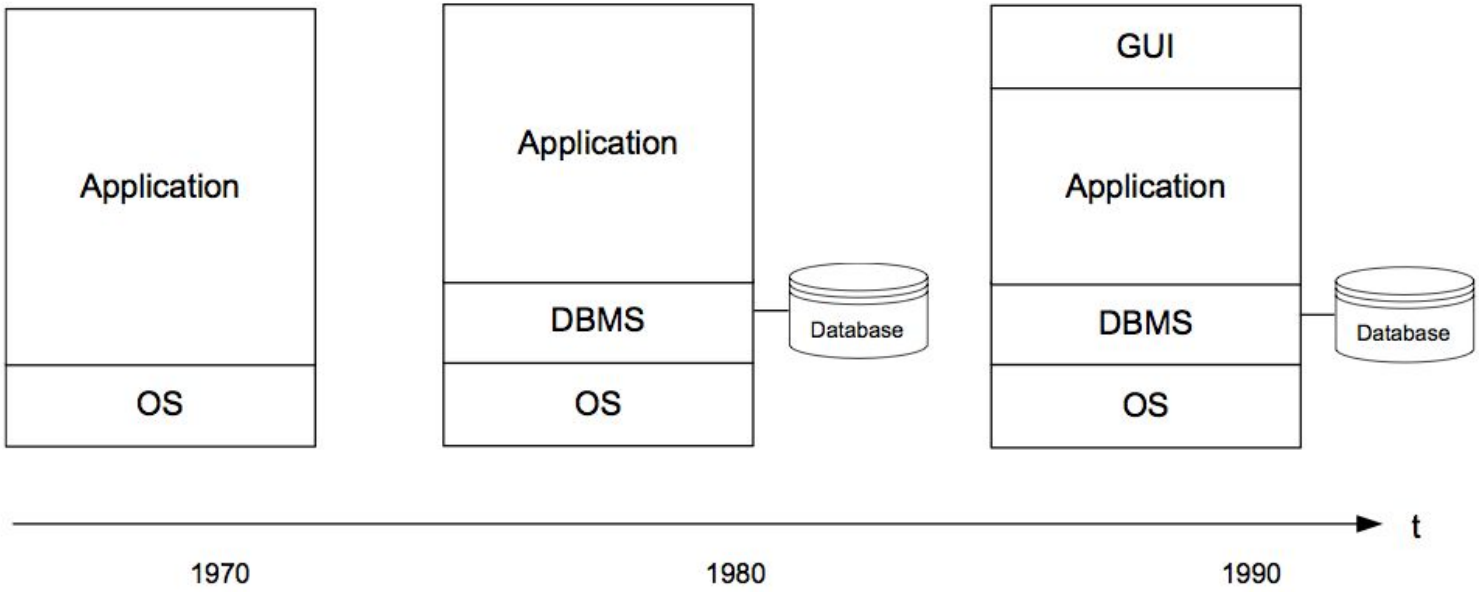

Fig. 2.1. Early systems architectures

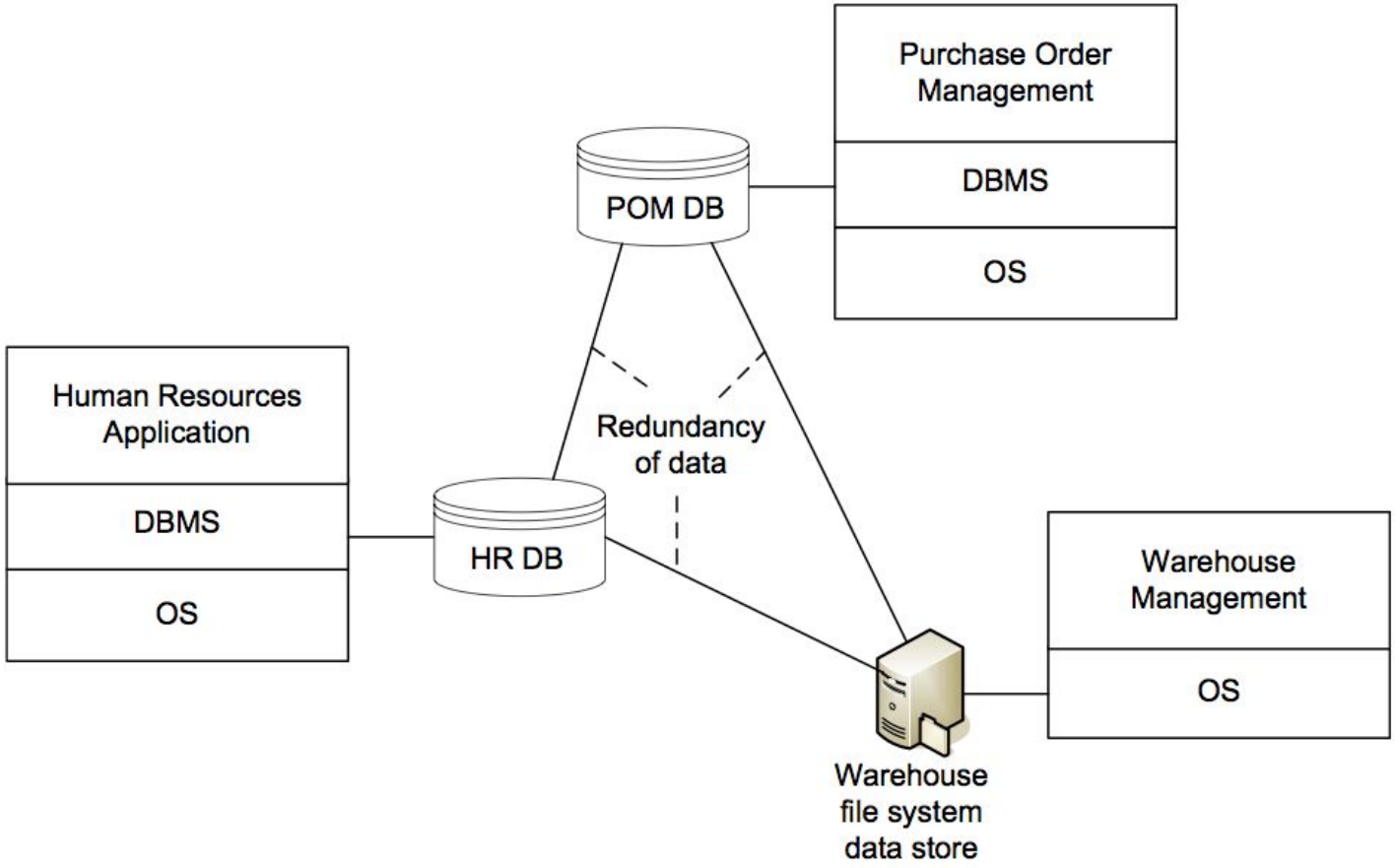

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Fig. 2.2. Enterprise applications with redundant data and data dependencies

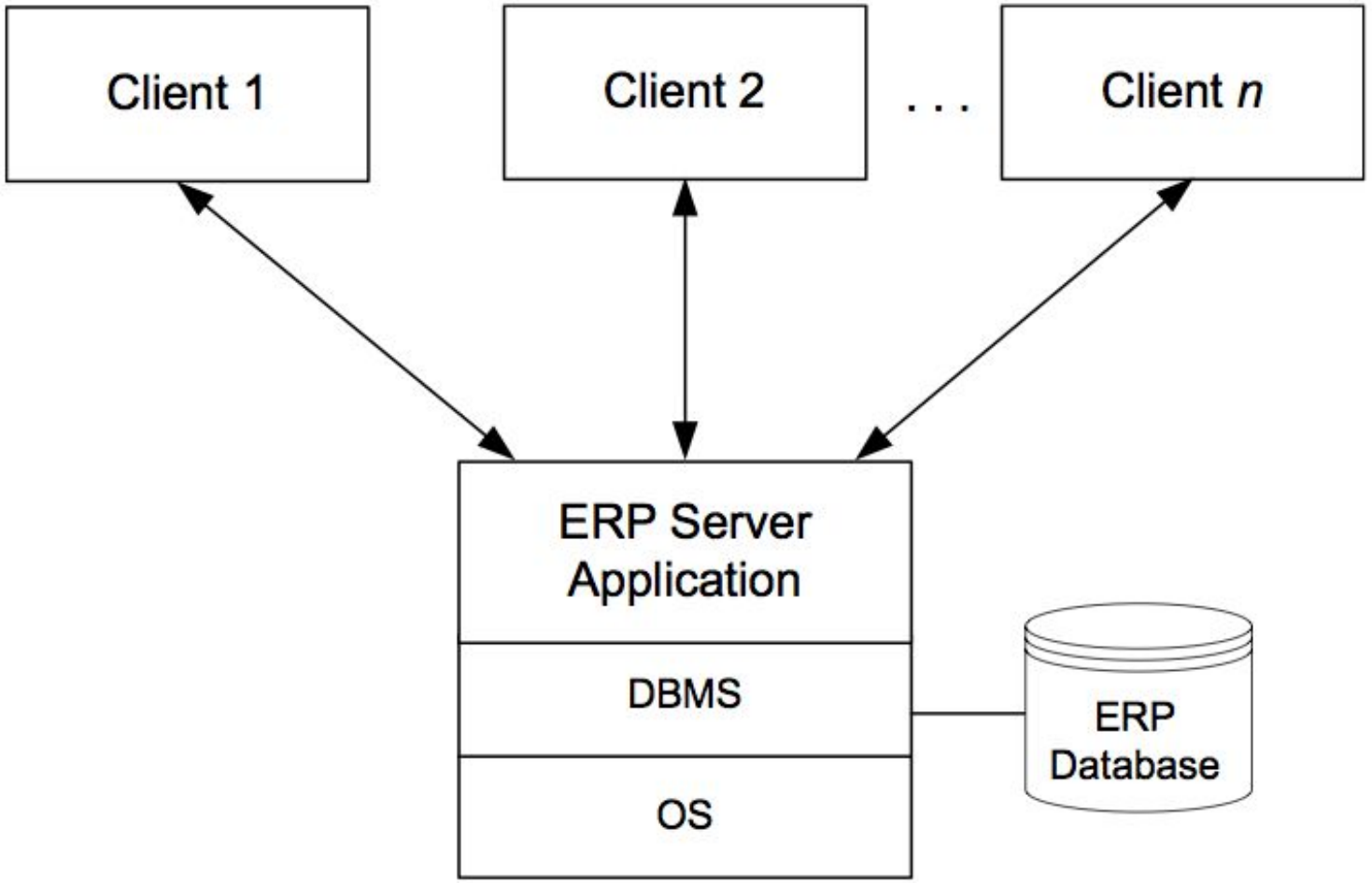

Fig. 2.3. Two-tier client-server architecture

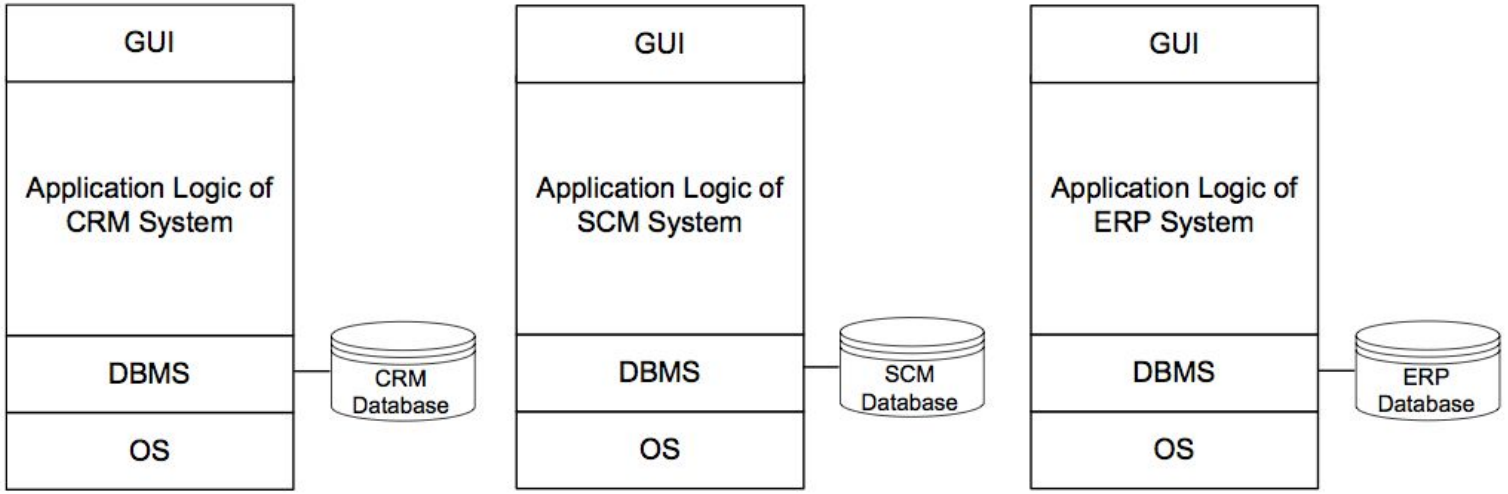

Fig. 2.4. Siloed enterprise applications

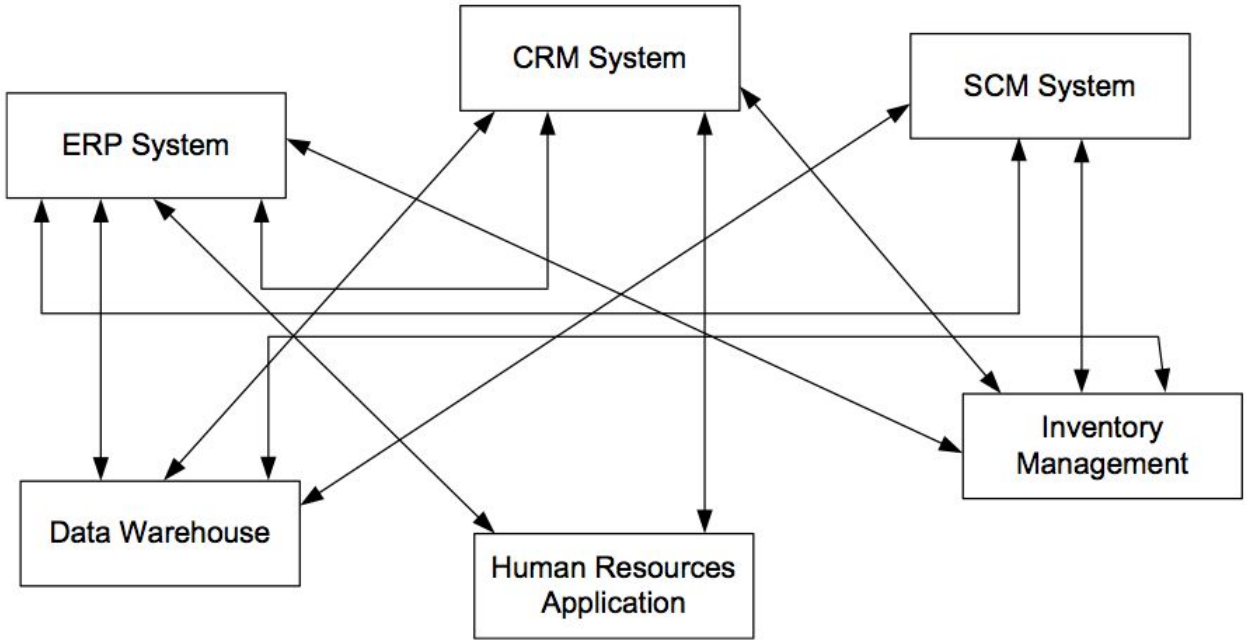

Fig. 2.5. Early enterprise application integration: hard-wiring of application systems results in $N \times N$ problem

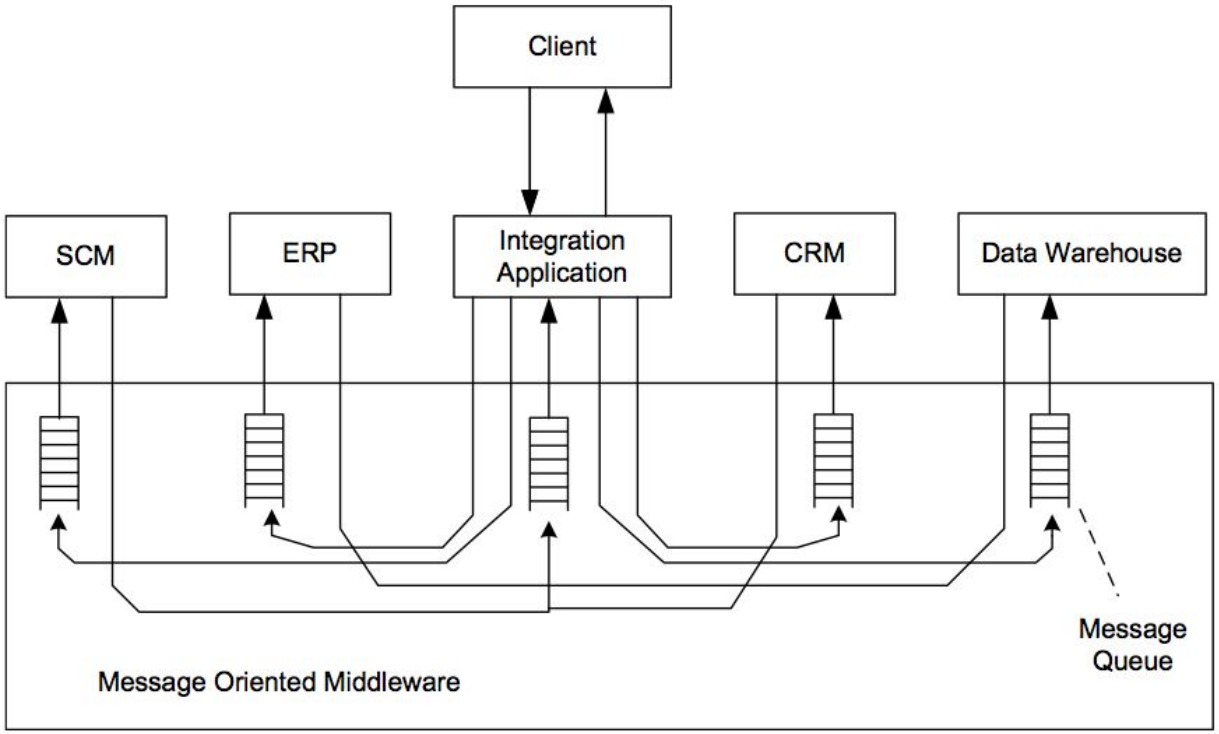

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Fig. 2.6. Message-oriented middleware for reliable communication between applications. Senders of messages encode receivers, and process logic is encoded in applications

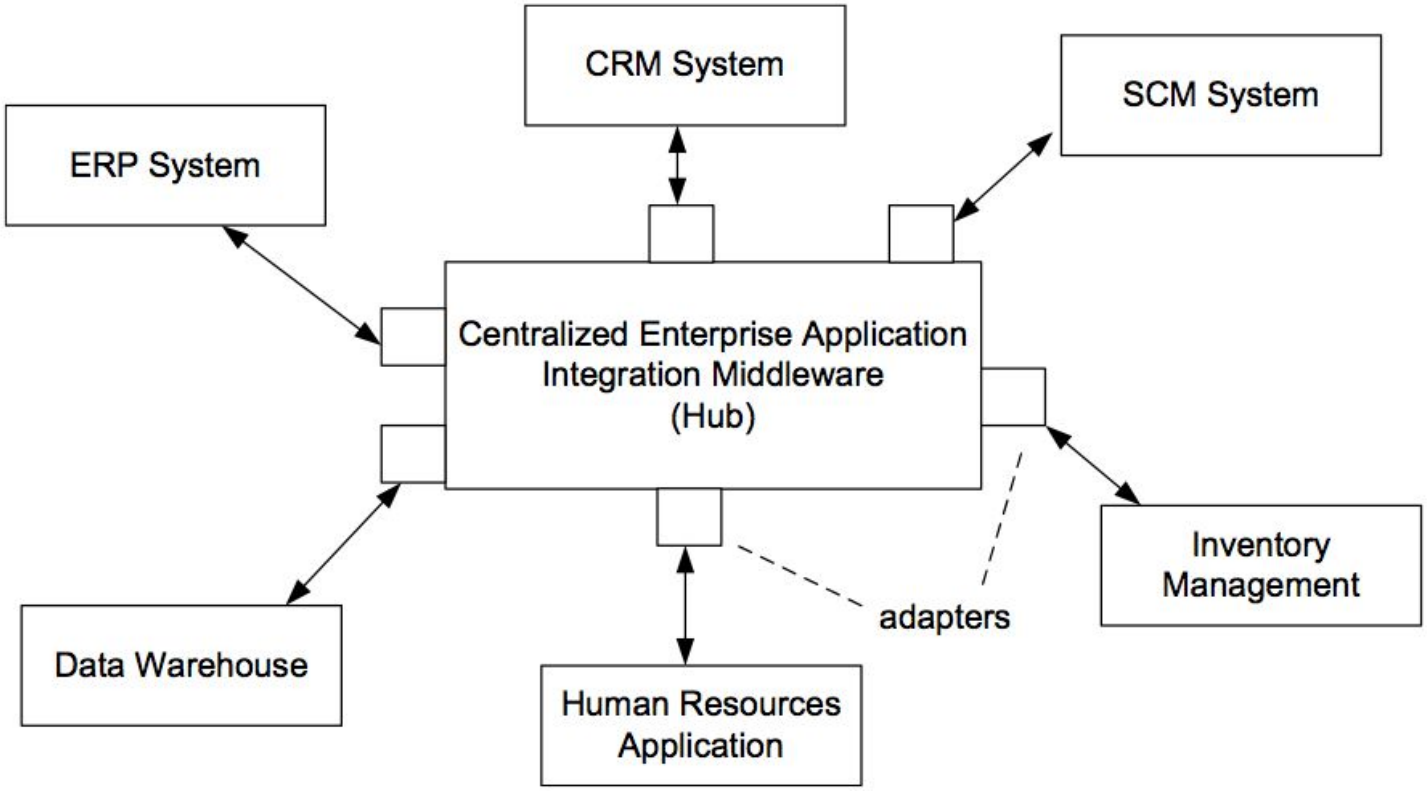

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Fig. 2.7. Hub-and-spoke enterprise application integration architecture

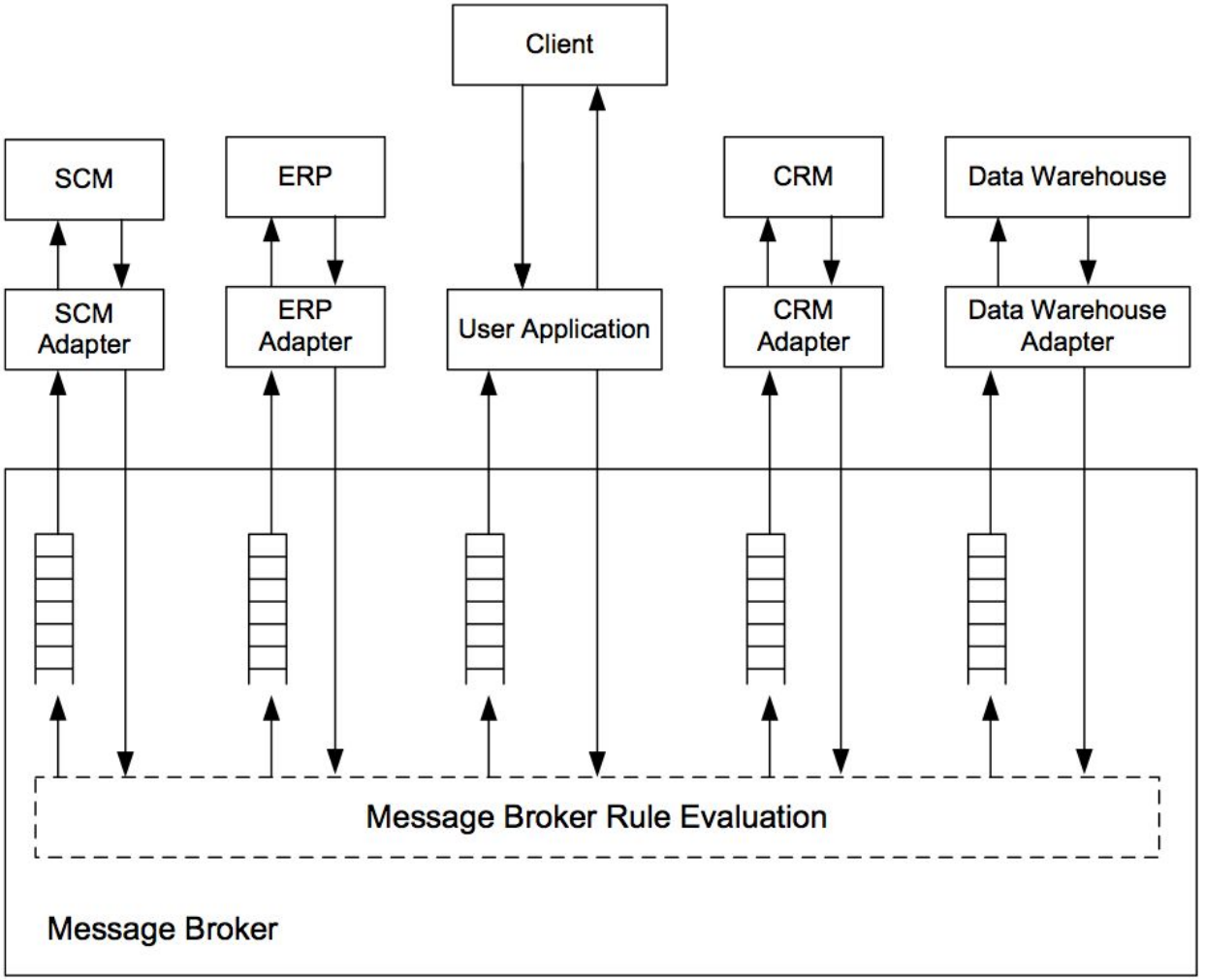

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Fig. 2.8. Message broker with declarative rules that de-couples senders from receivers and eases response to change

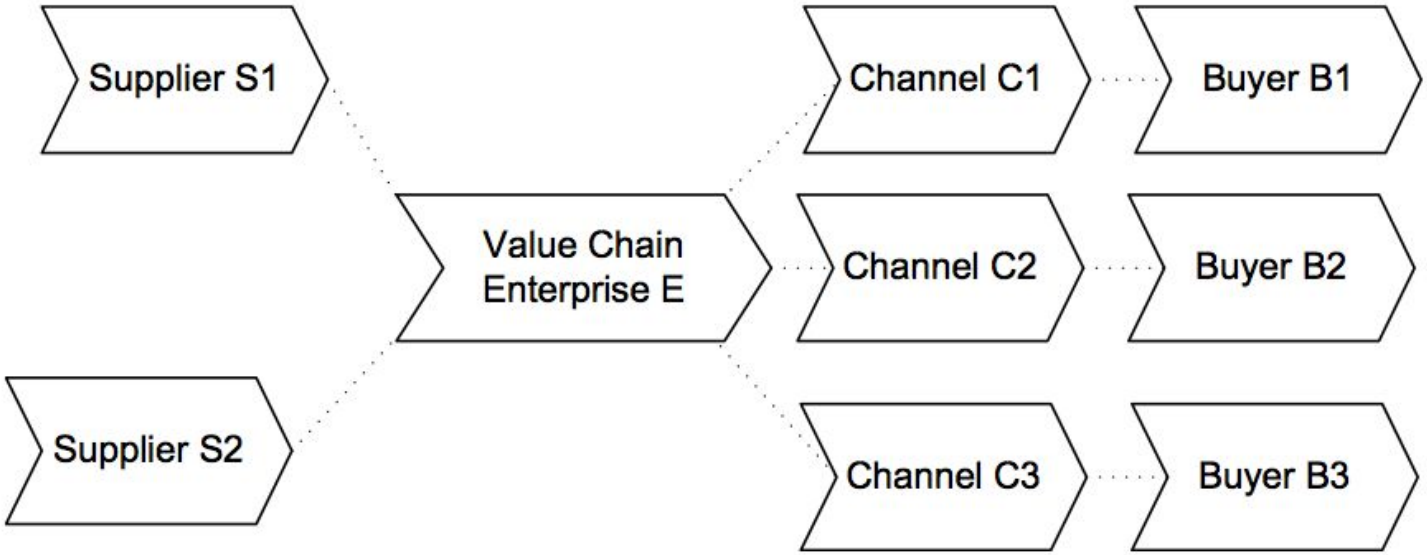

Fig. 2.9. Value system

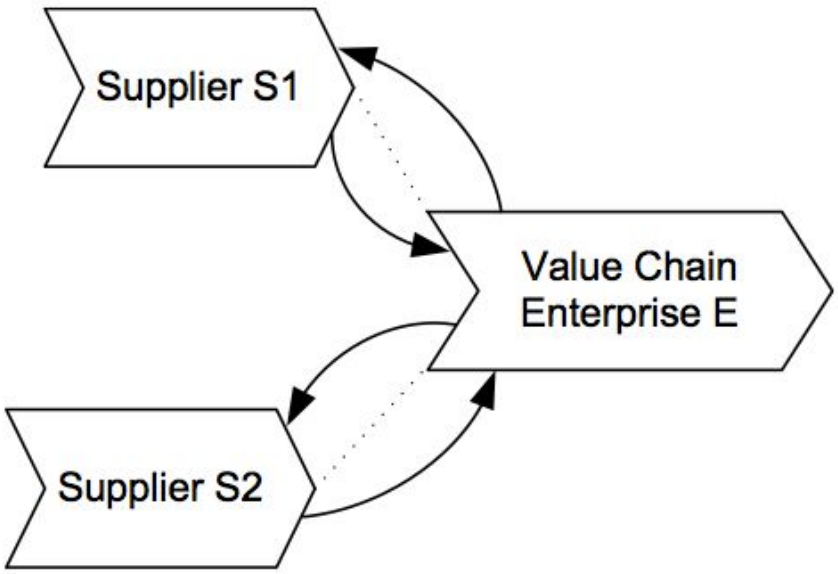

Fig. 2.10. Value system with interactions represented by arcs

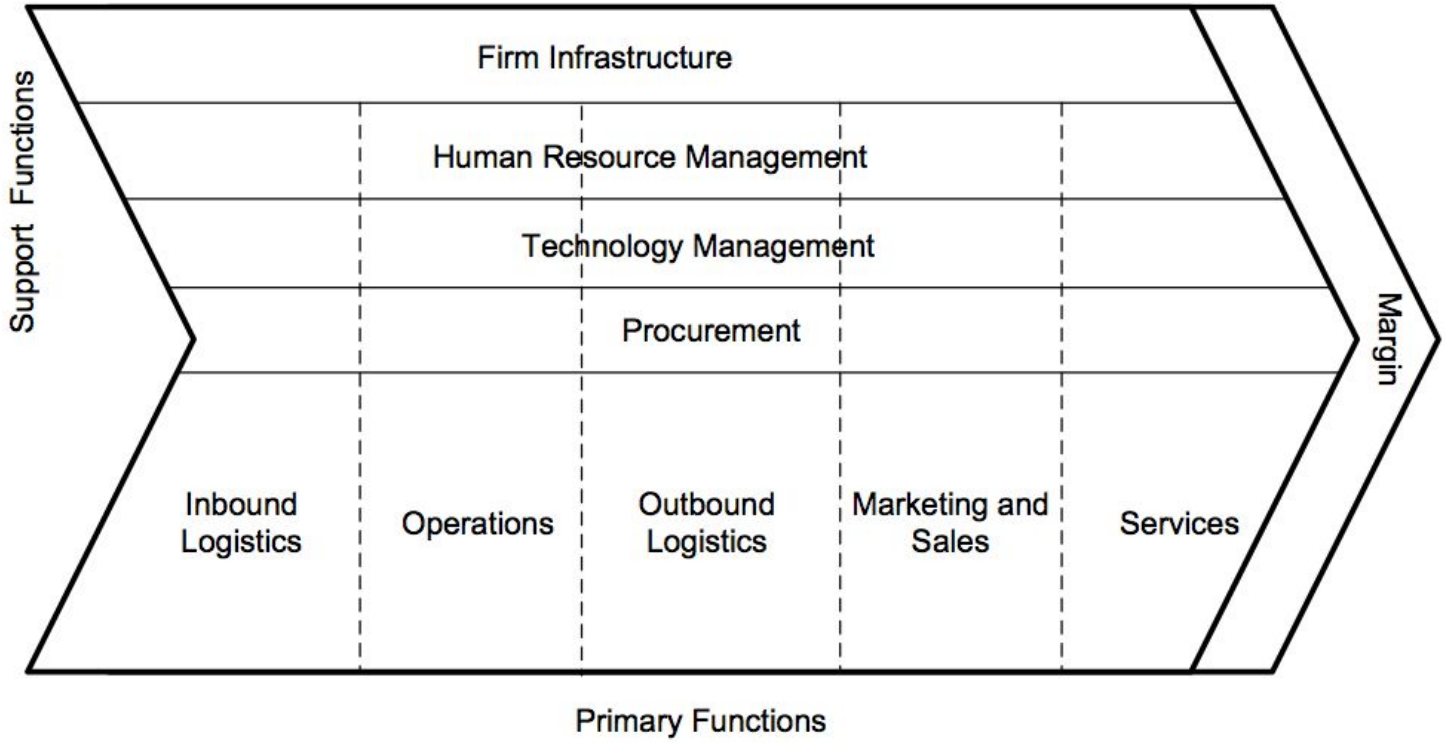

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Fig. 2.11. Internal structure of value chain

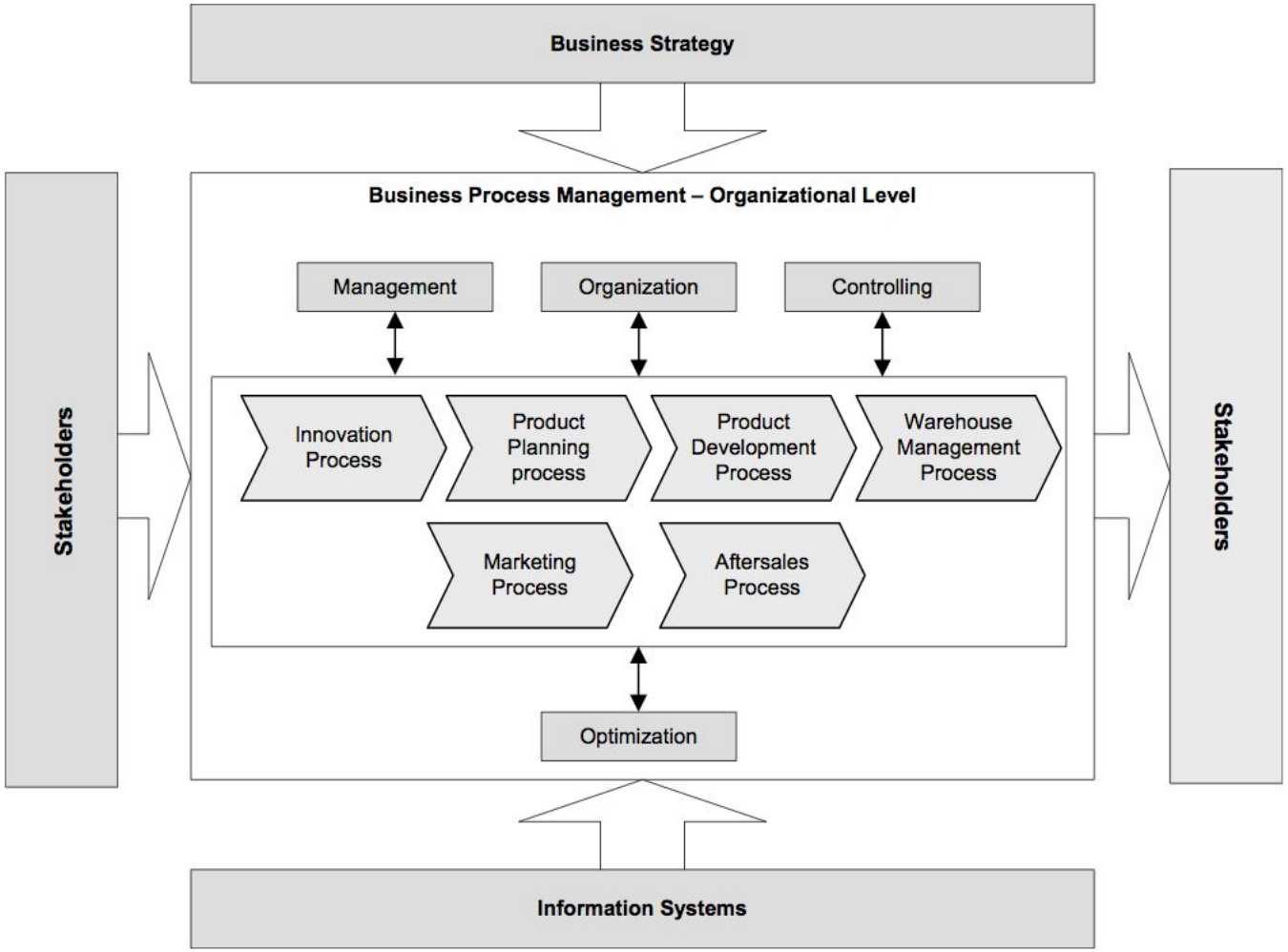

Fig. 2.12. Organization-level business process management, based on Schmelzer and Sesselmann (2010)

Process Name: Product Development Process	**Responsible Process Manager:** Dr. Myers
From: Requirements **To:** Rollout	**Type:** Development Project
Process Inputs: Requirements Document, Product specification, Budget Plan, Prototypes	**Supplier Processes:** Product Planning Process, Innovation Process
Process Results: Integrated and completely tested innovative product with complete documentation	**Customer Processes:** Order Management Process, After-Sales Service Process

Fig. 2.13. Forms-based description of organizational business process, based on Schmelzer and Sesselmann (2010)

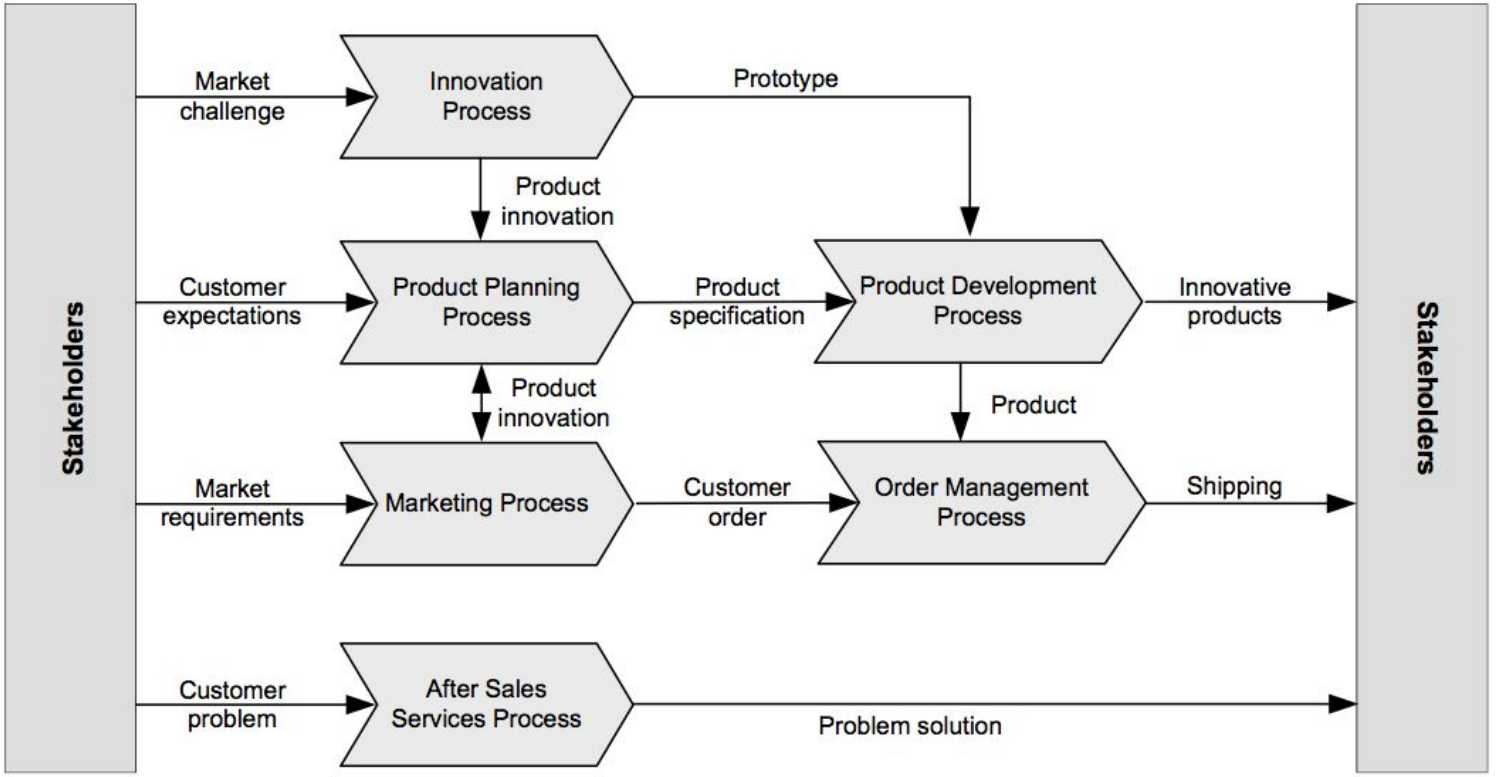

Fig. 2.14. Process landscape relating organizational business processes with stakeholders, based on Schmelzer and Sesselmann (2010)

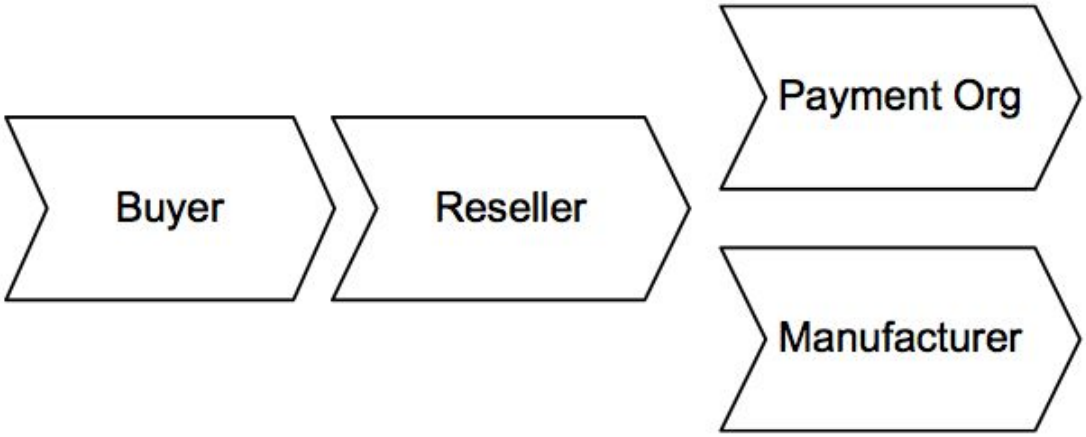

Fig. 2.15. Sample value system involving multiple companies

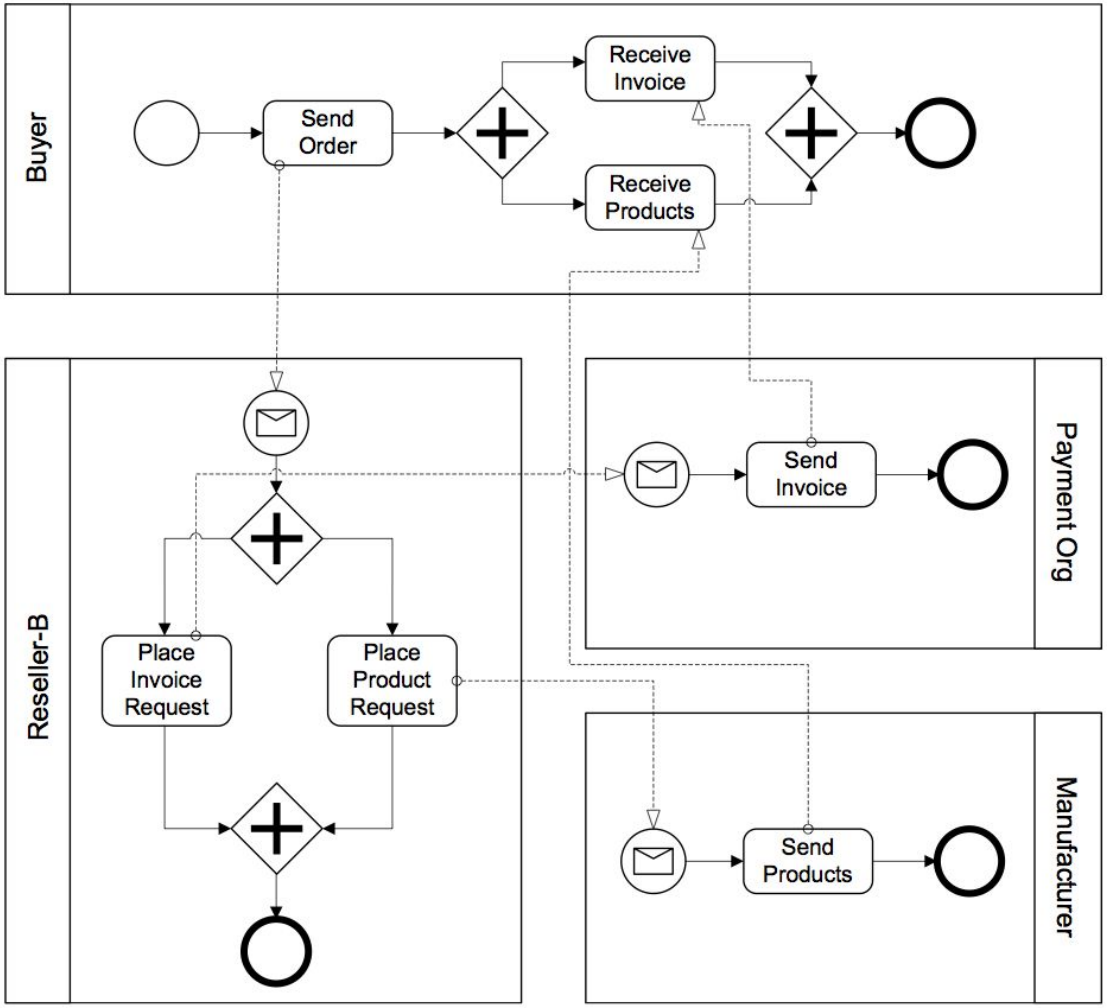

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Fig. 2.16. Example of business-to-business collaboration through interacting business processes

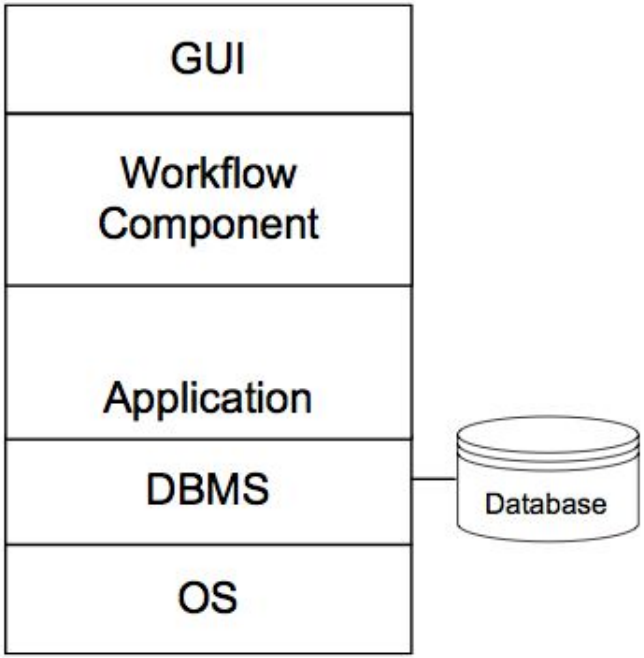

Fig. 2.17. Single-application workflow systems achitecture

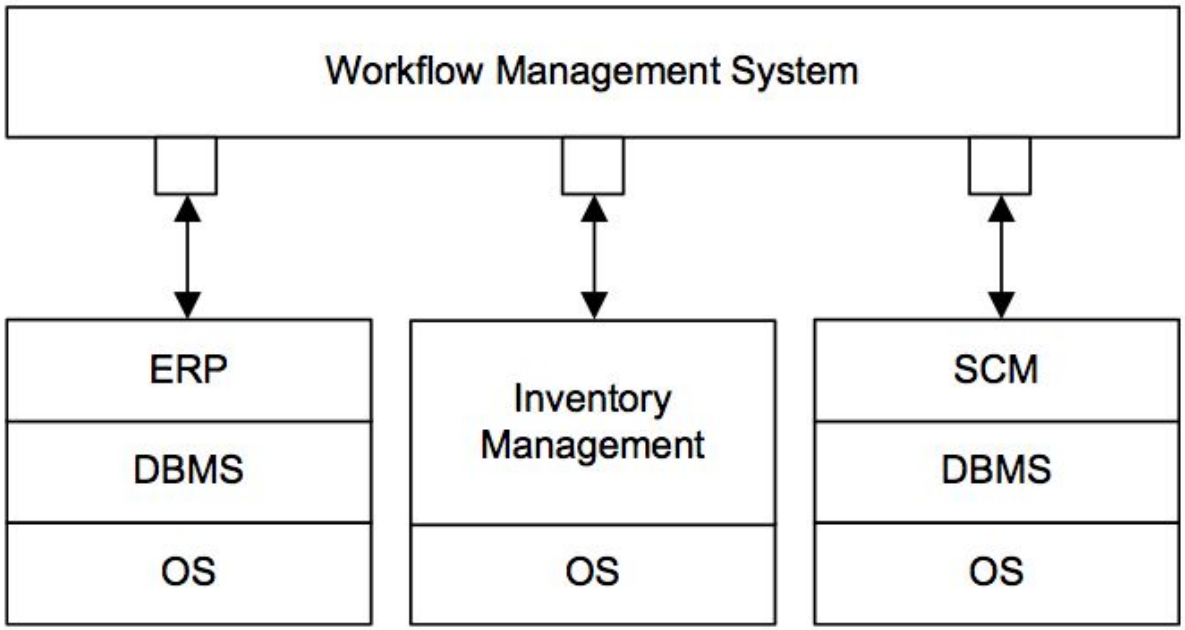

Fig. 2.18. Multiple-application workflow systems architecture

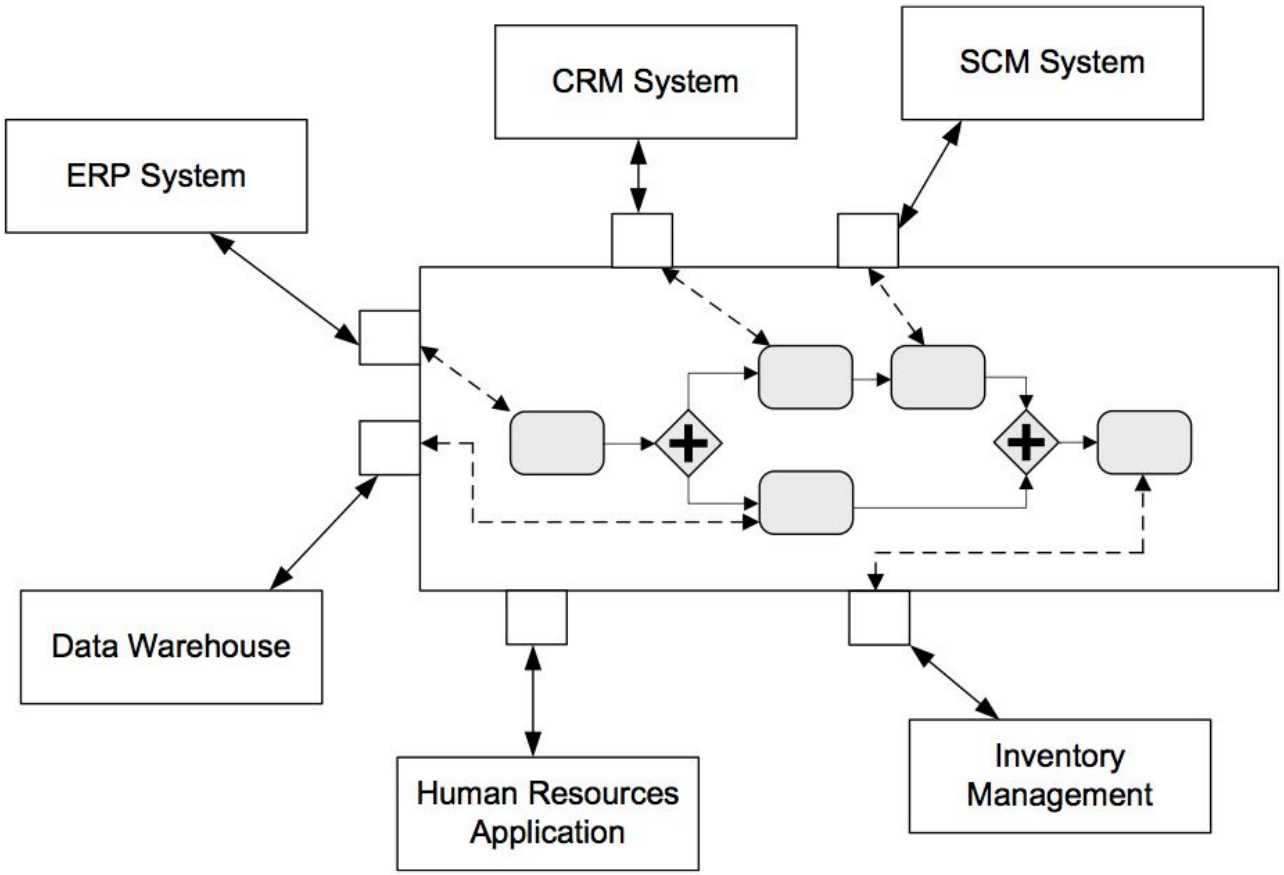

Fig. 2.19. System workflow integration scenario; a process model defines if and when enterprise applications are invoked

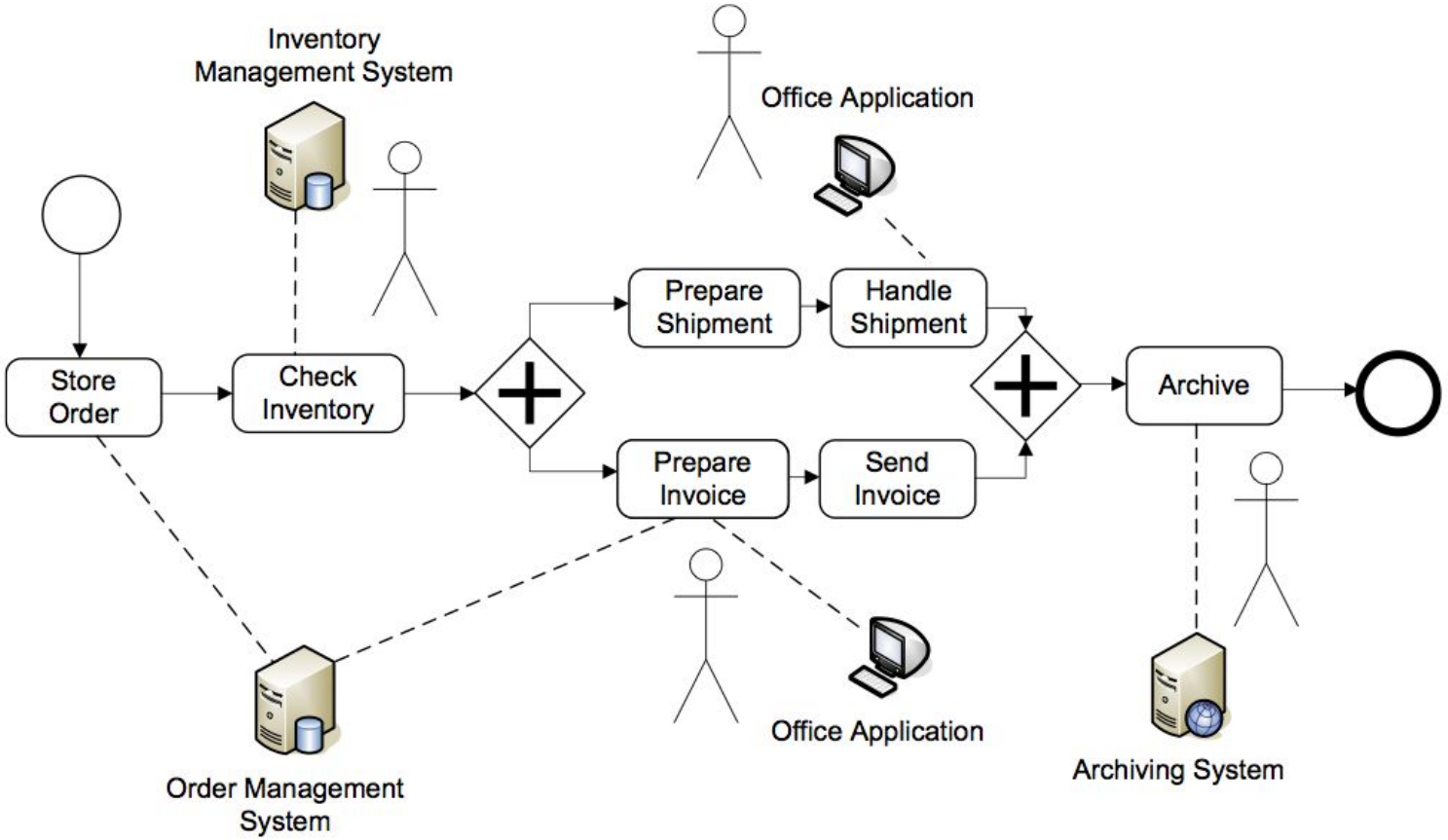

Fig. 2.20. Sample human interaction workflow

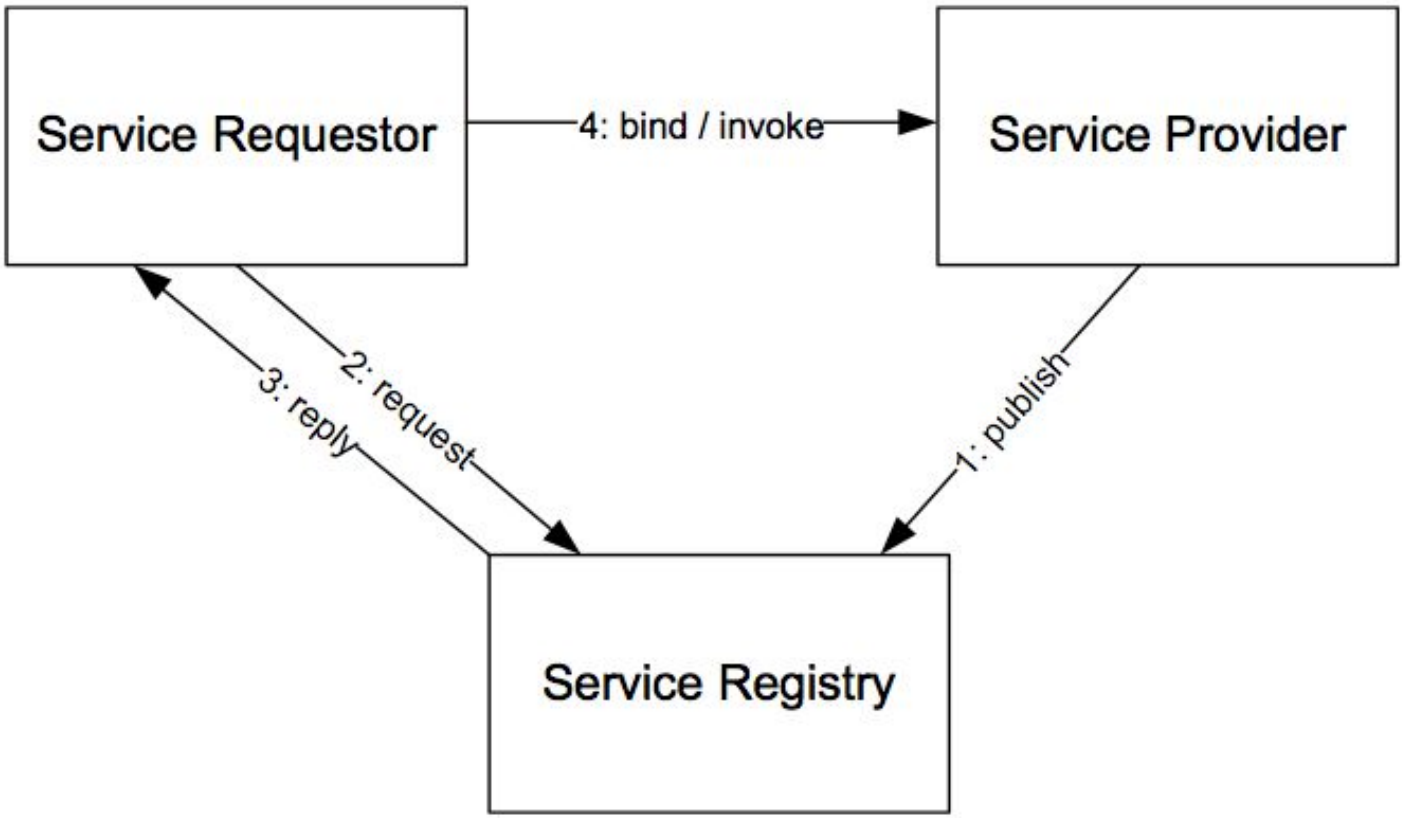

Fig. 2.21. Roles in service-oriented architectures

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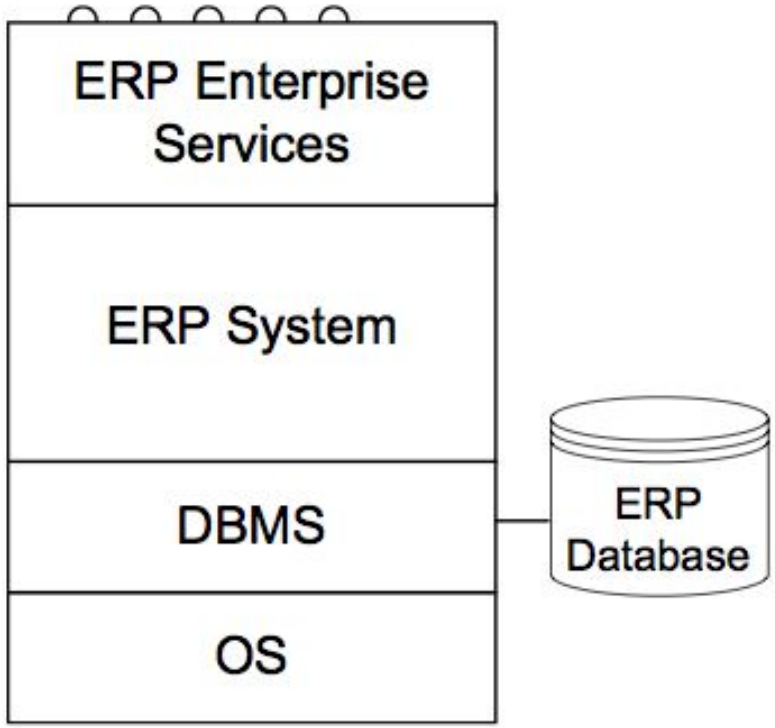

Fig. 2.22. Service-enabled application system

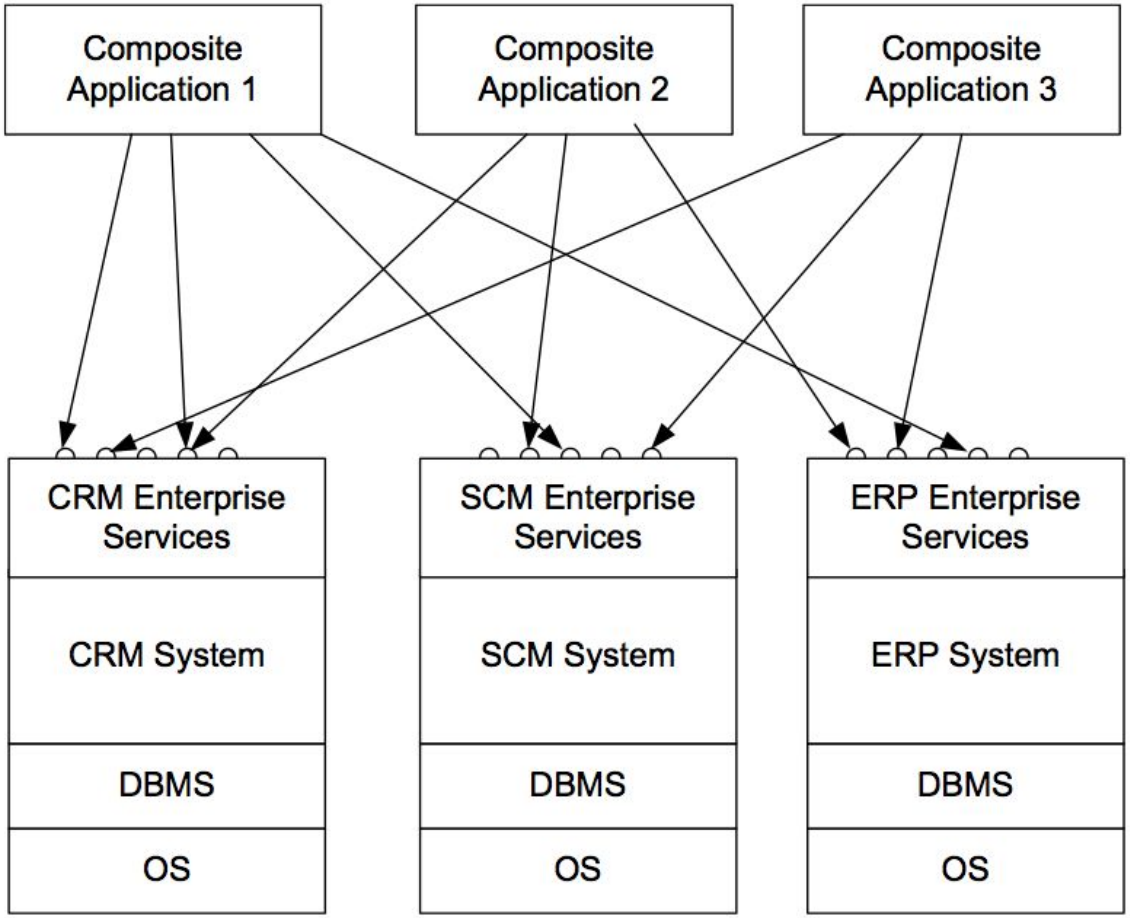

Fig. 2.23. Enterprise systems expose functionality through enterprise services

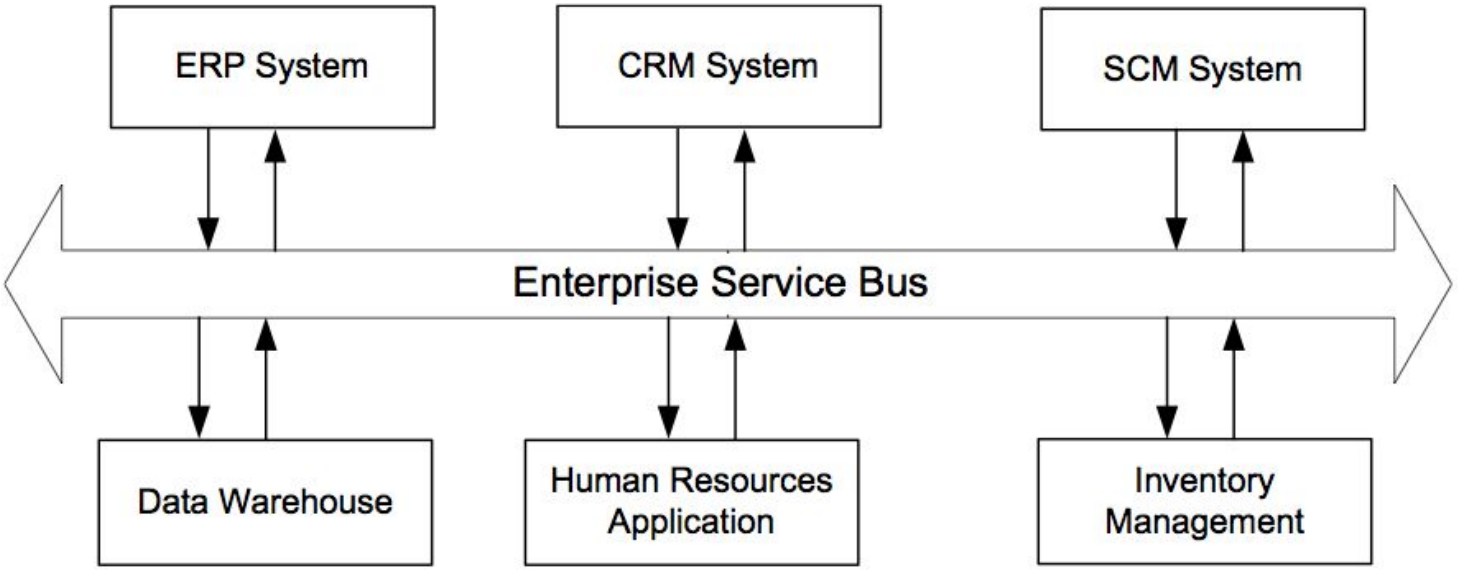

Fig. 2.24. Enterprise service bus

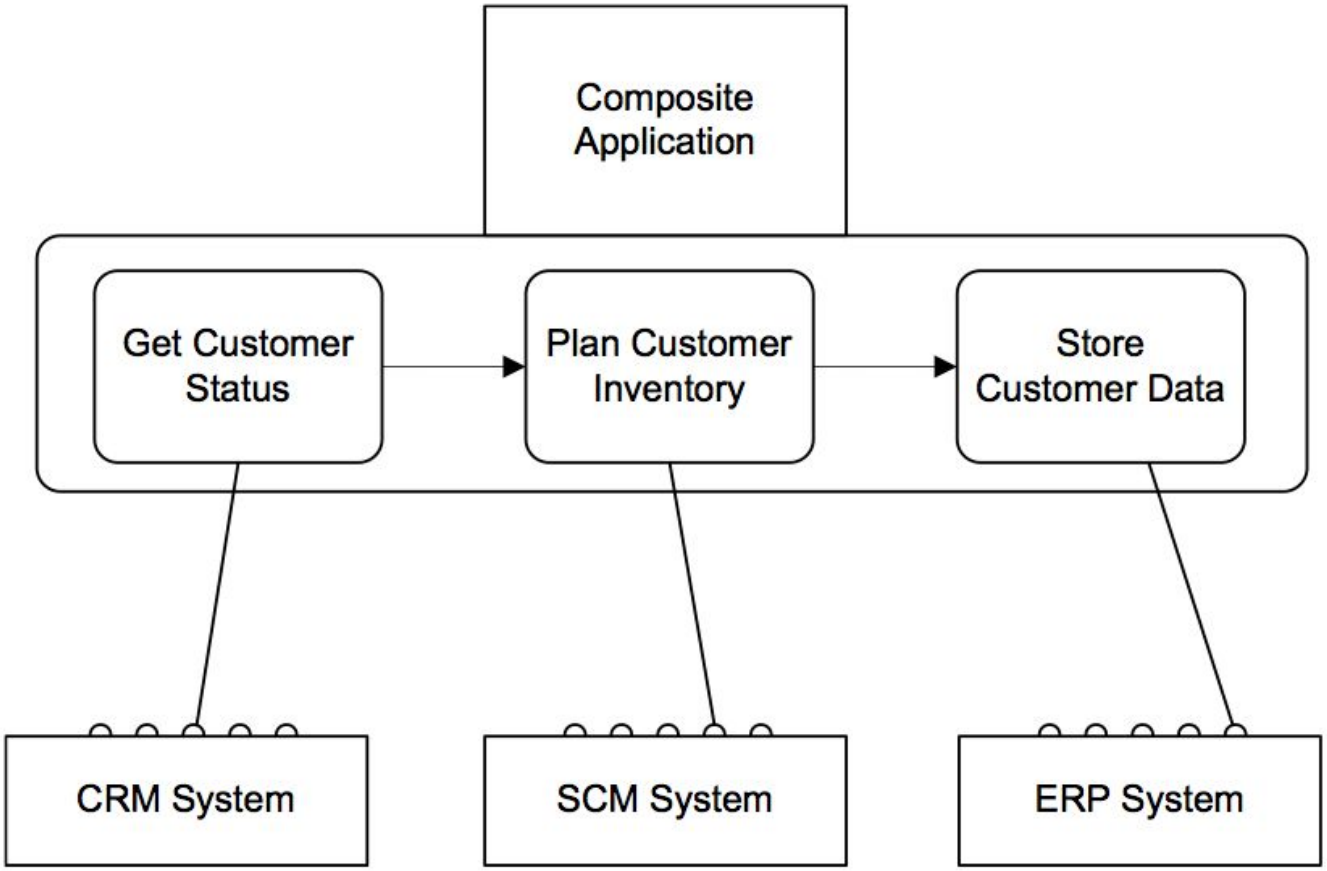

Fig. 2.25. Using service composition to realize composite applications

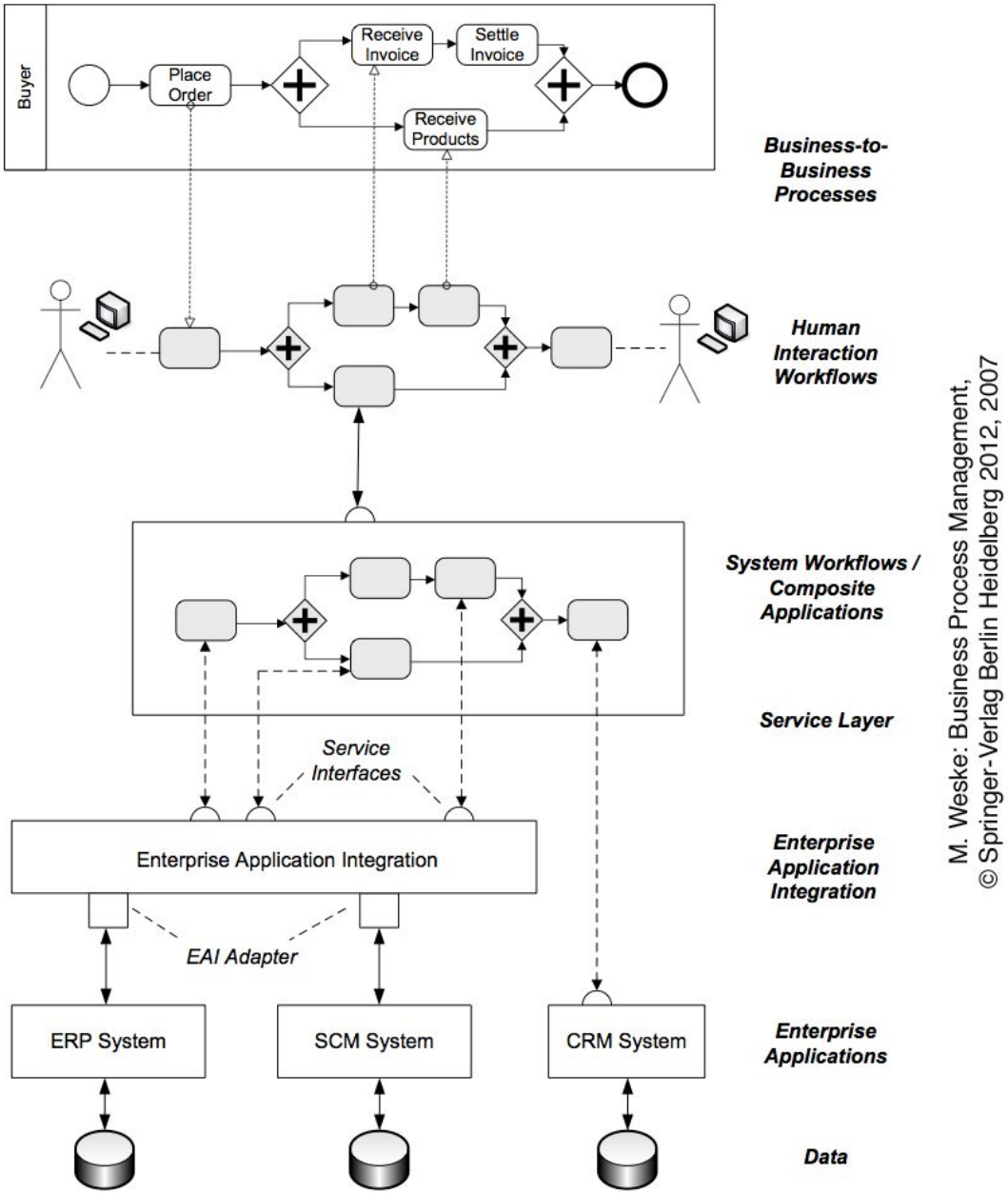

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Fig. 2.26. Business process management landscape