Business Process Management: Concepts, Languages, Architectures

Second Edition

Figures of Chapter 2

Mathias Weske

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  - Mathias Weske, Business Process Management: Concepts, Languages, Architectures 2012, XIV, 403 p. 300 illus., Hardcover ISBN: 978-3-642-28615-5, eBook ISBN: 978-3-642-28616-2 © Springer-Verlag Berlin Heidelberg 2012, 2007
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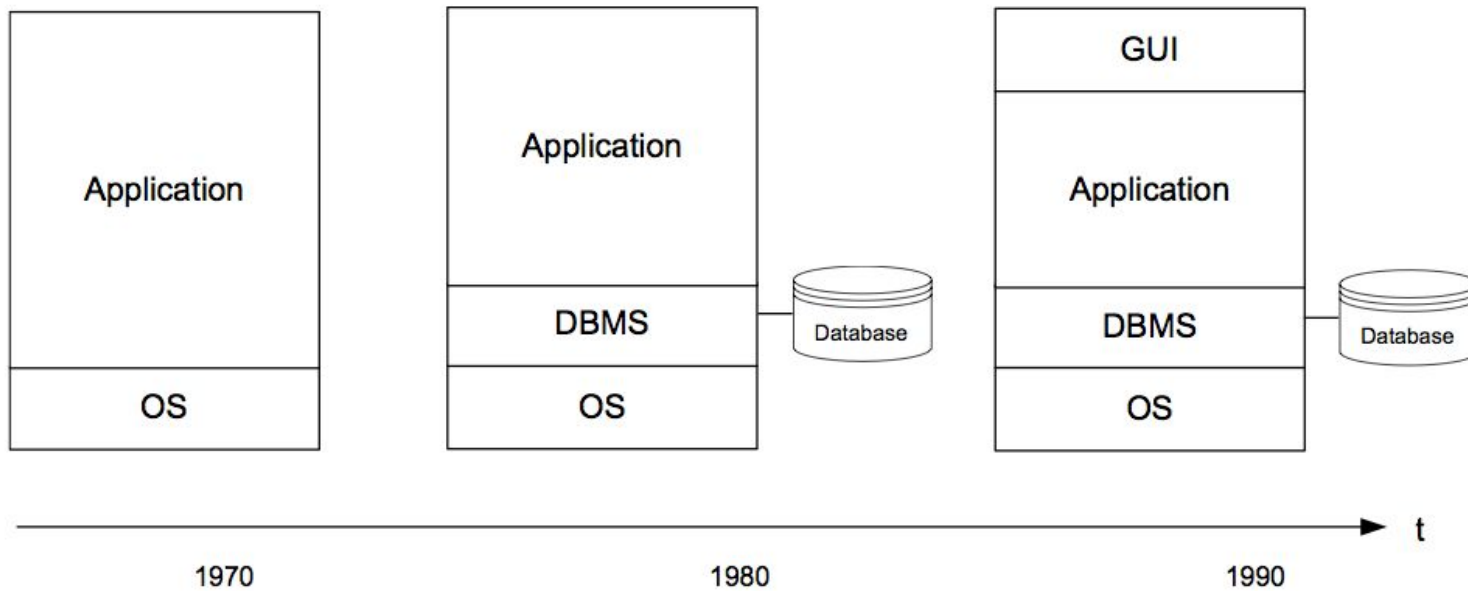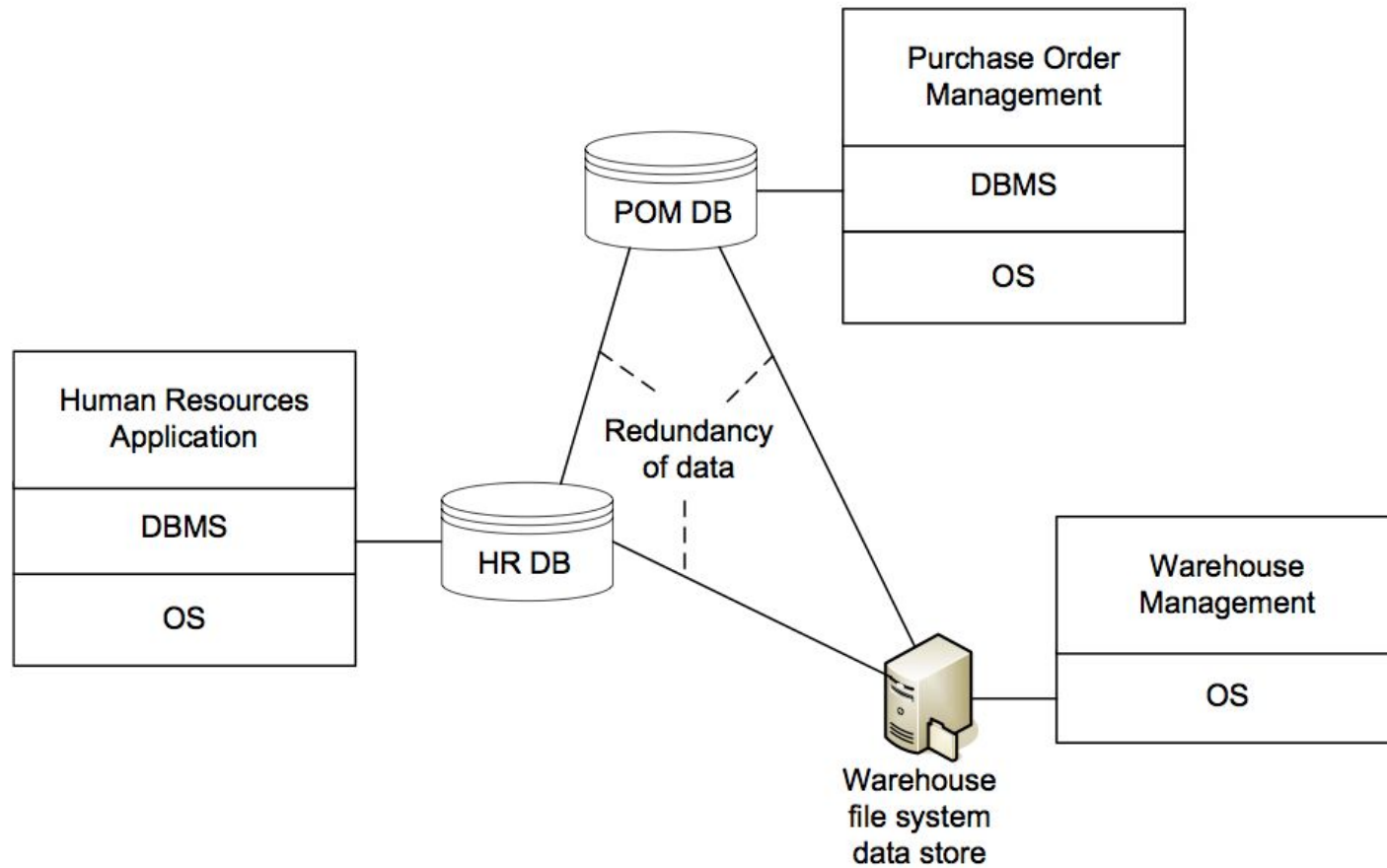
Best regards,
Mathias Weske

Fig. 2.1. Early systems architectures

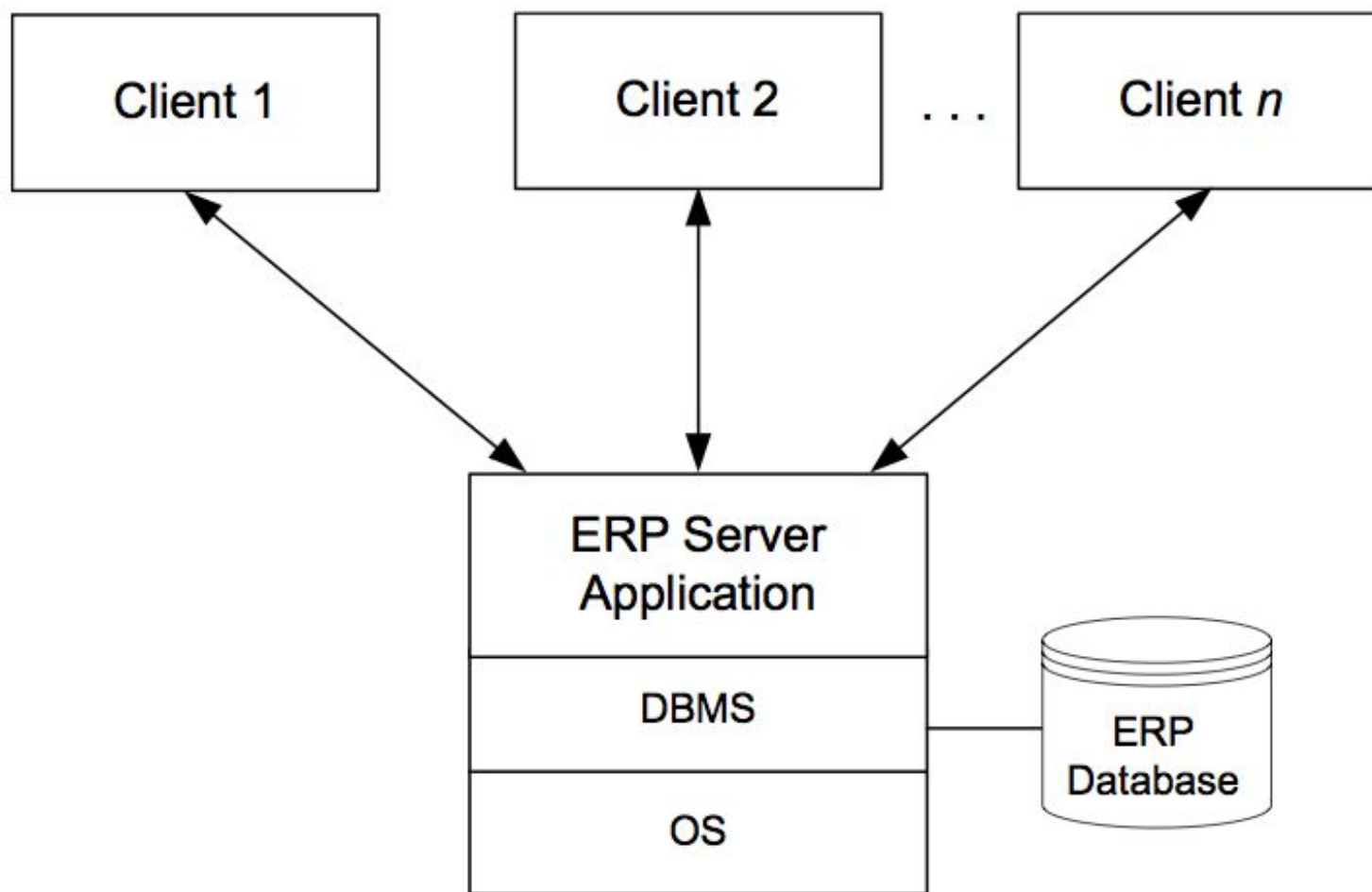**Fig. 2.2.** Enterprise applications with redundant data and data dependencies

Fig. 2.3. Two-tier client-server architecture

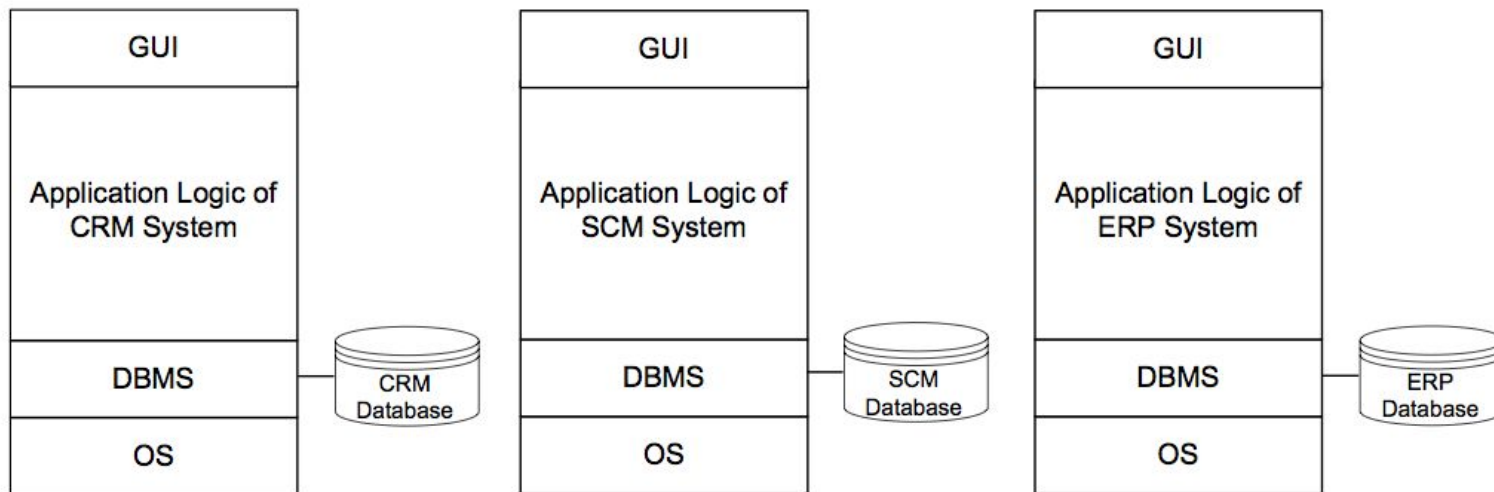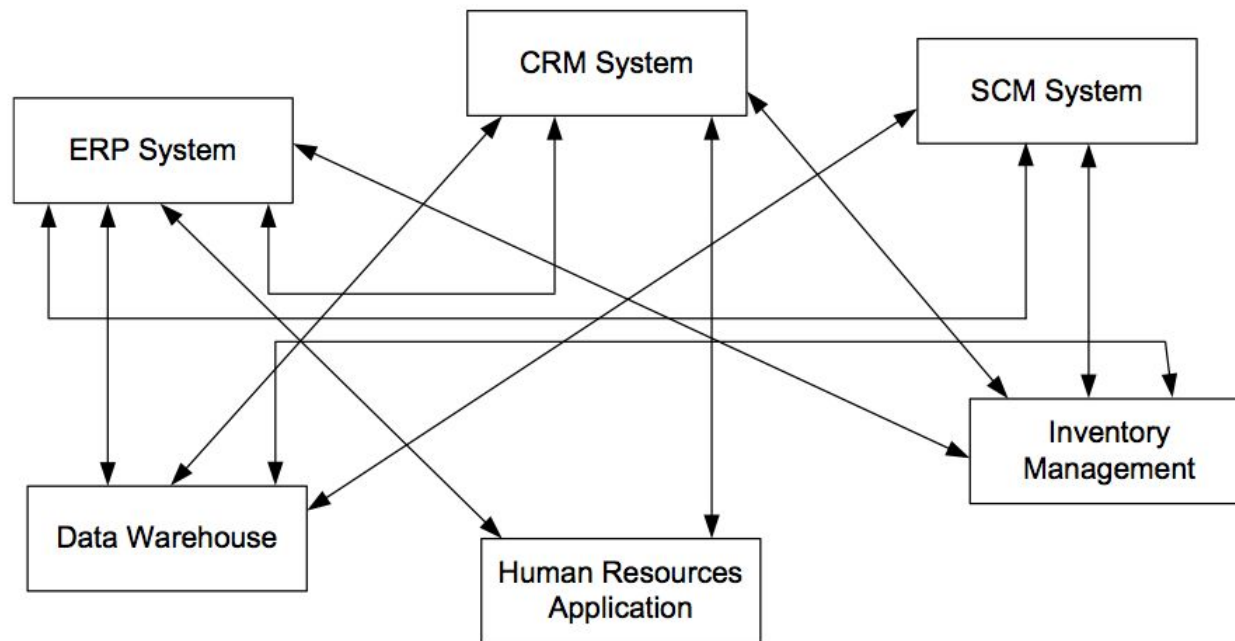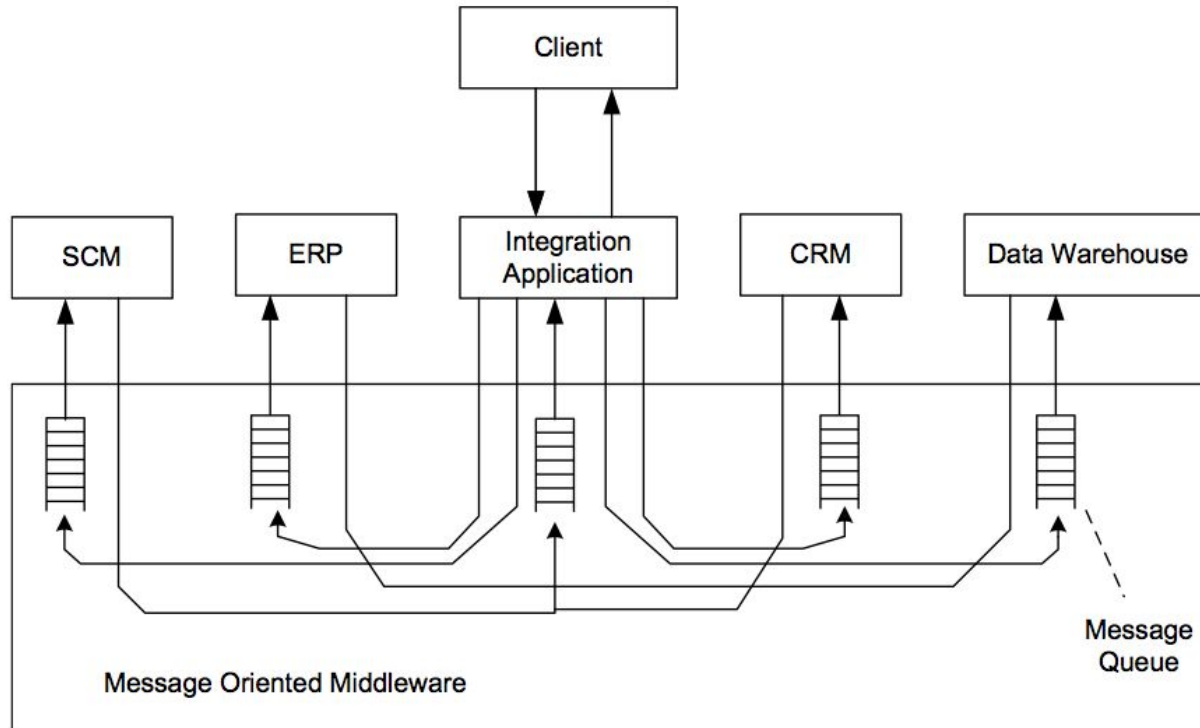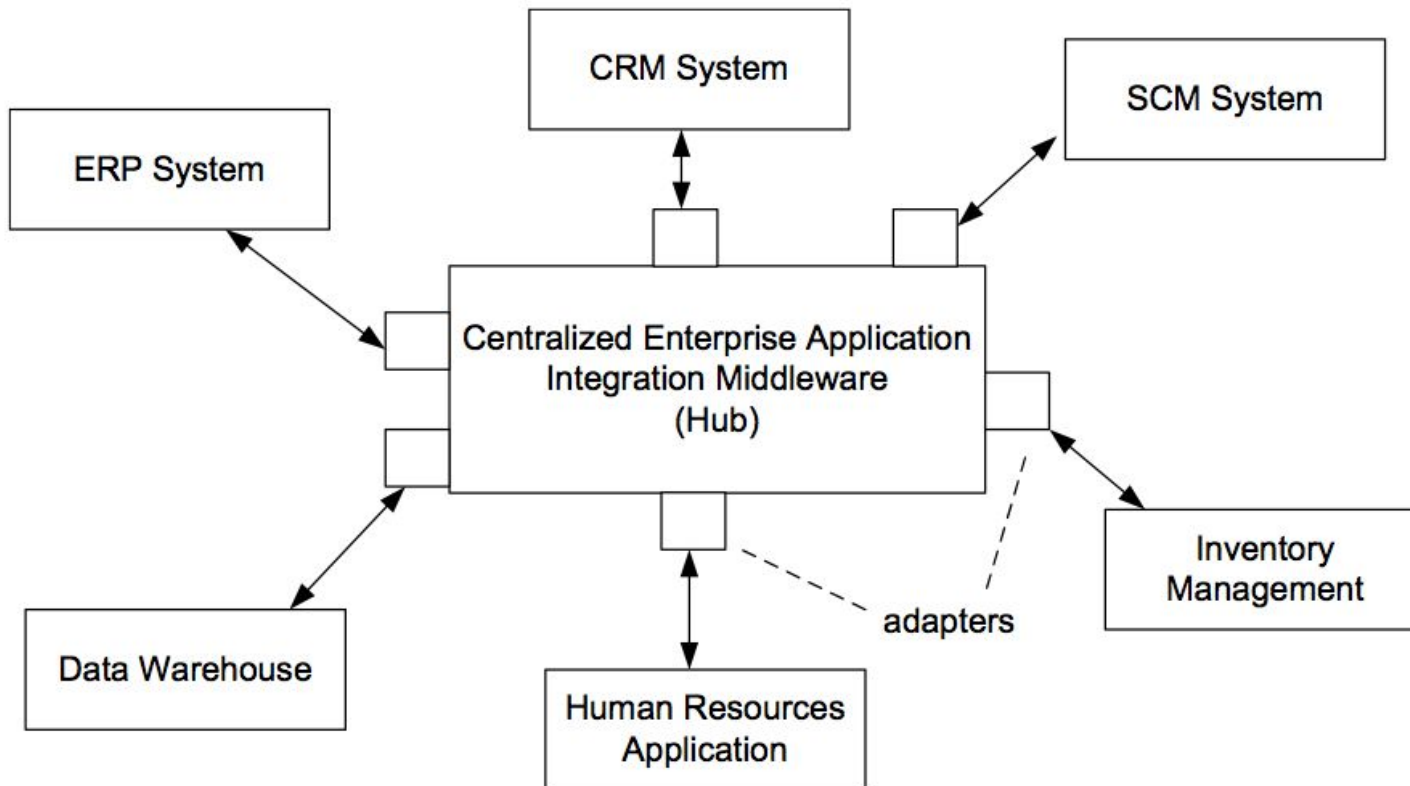**Fig. 2.4.** Siloed enterprise applications

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

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

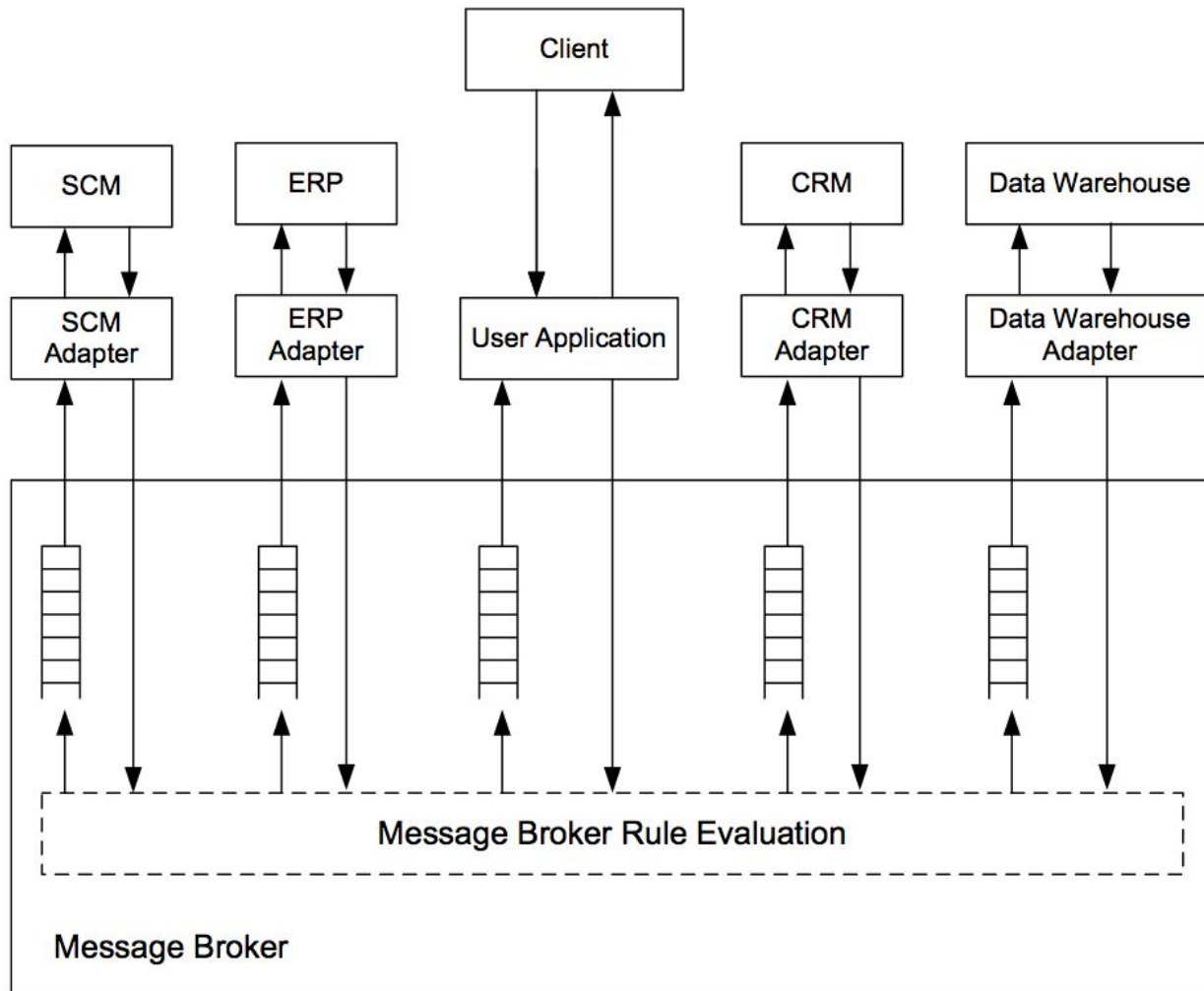**Fig. 2.7.** Hub-and-spoke enterprise application integration architecture

Fig. 2.8. Message broker with declarative rules that de-couples senders from receivers and eases response to change
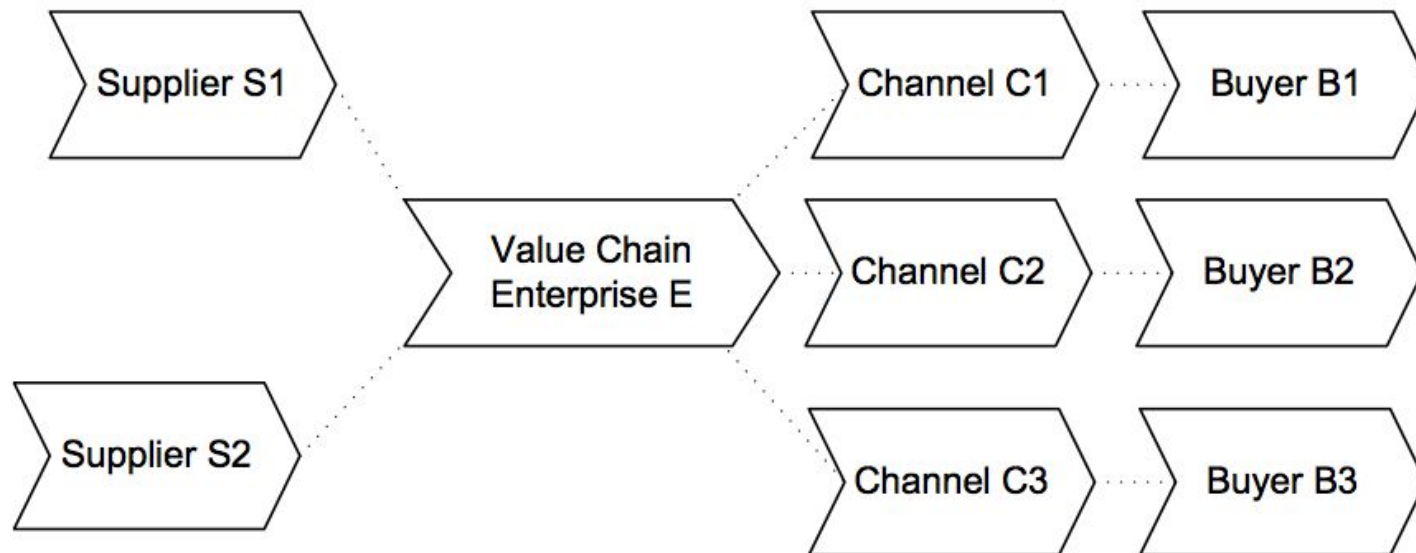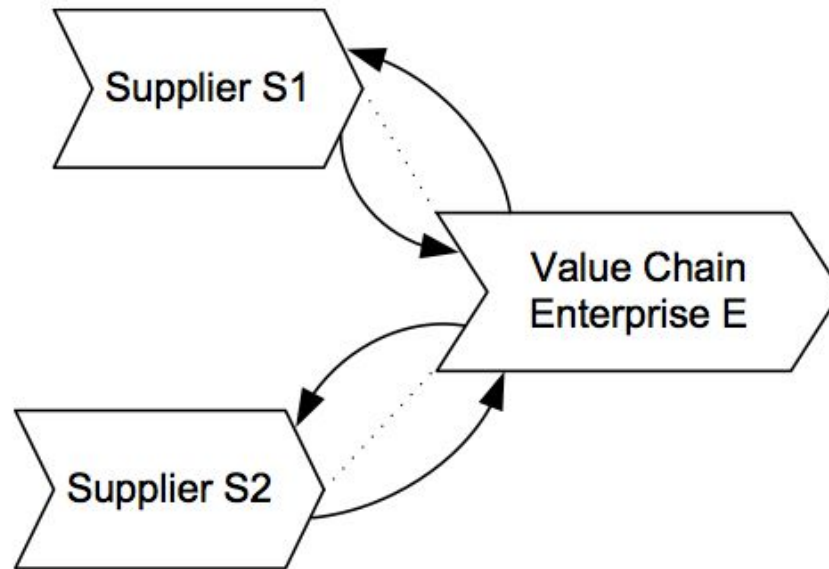
Fig. 2.9. Value system

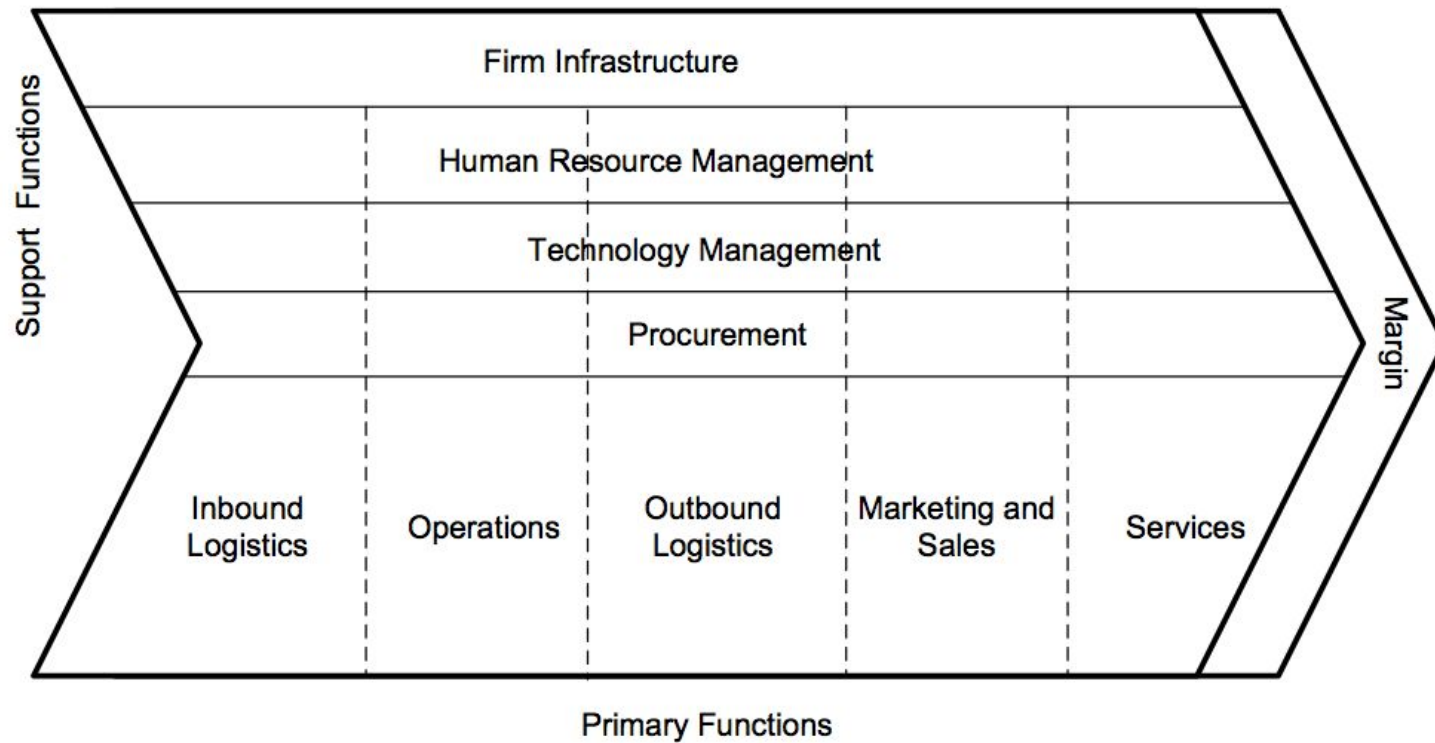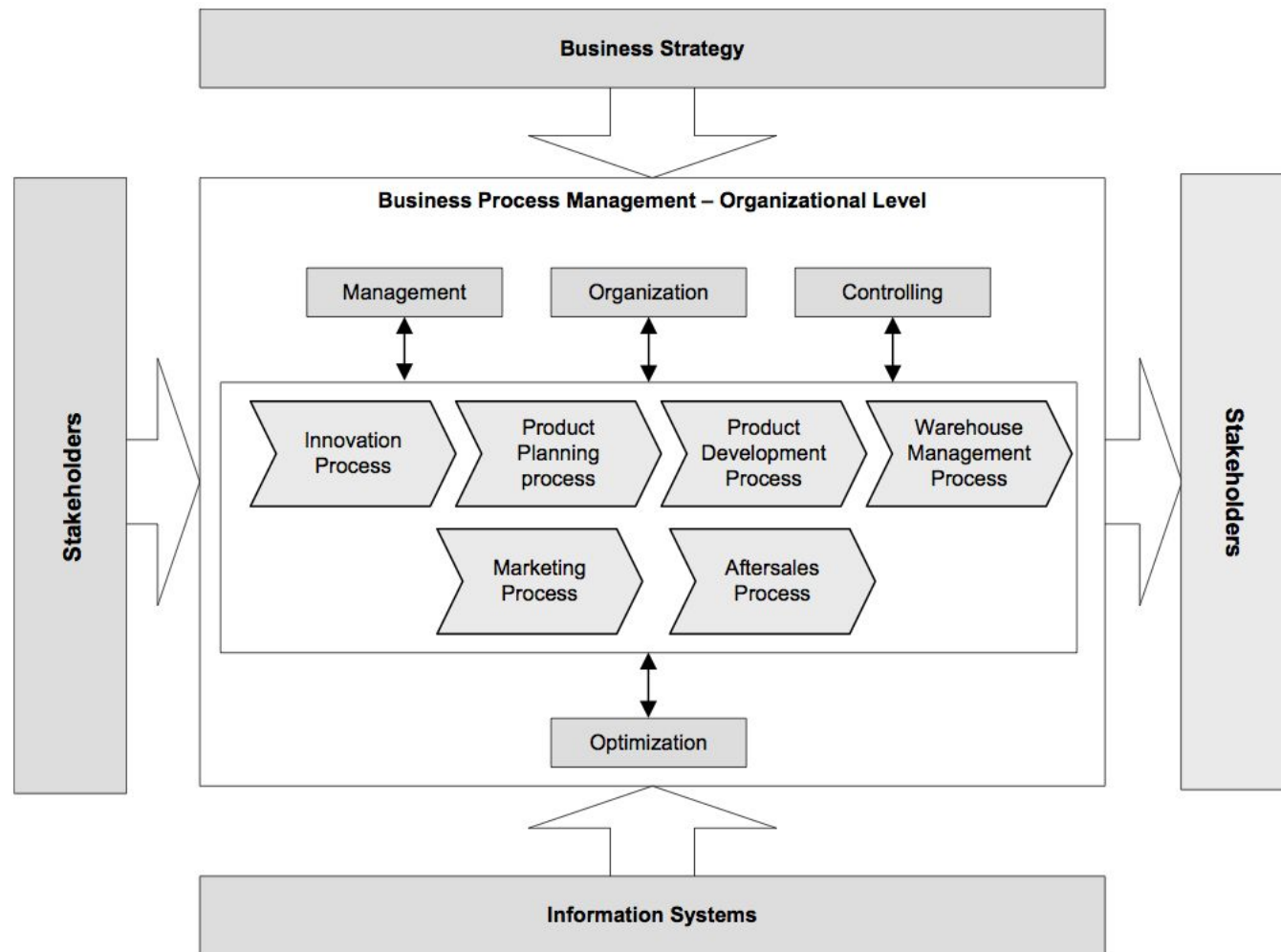**Fig. 2.10.** Value system with interactions represented by arcs

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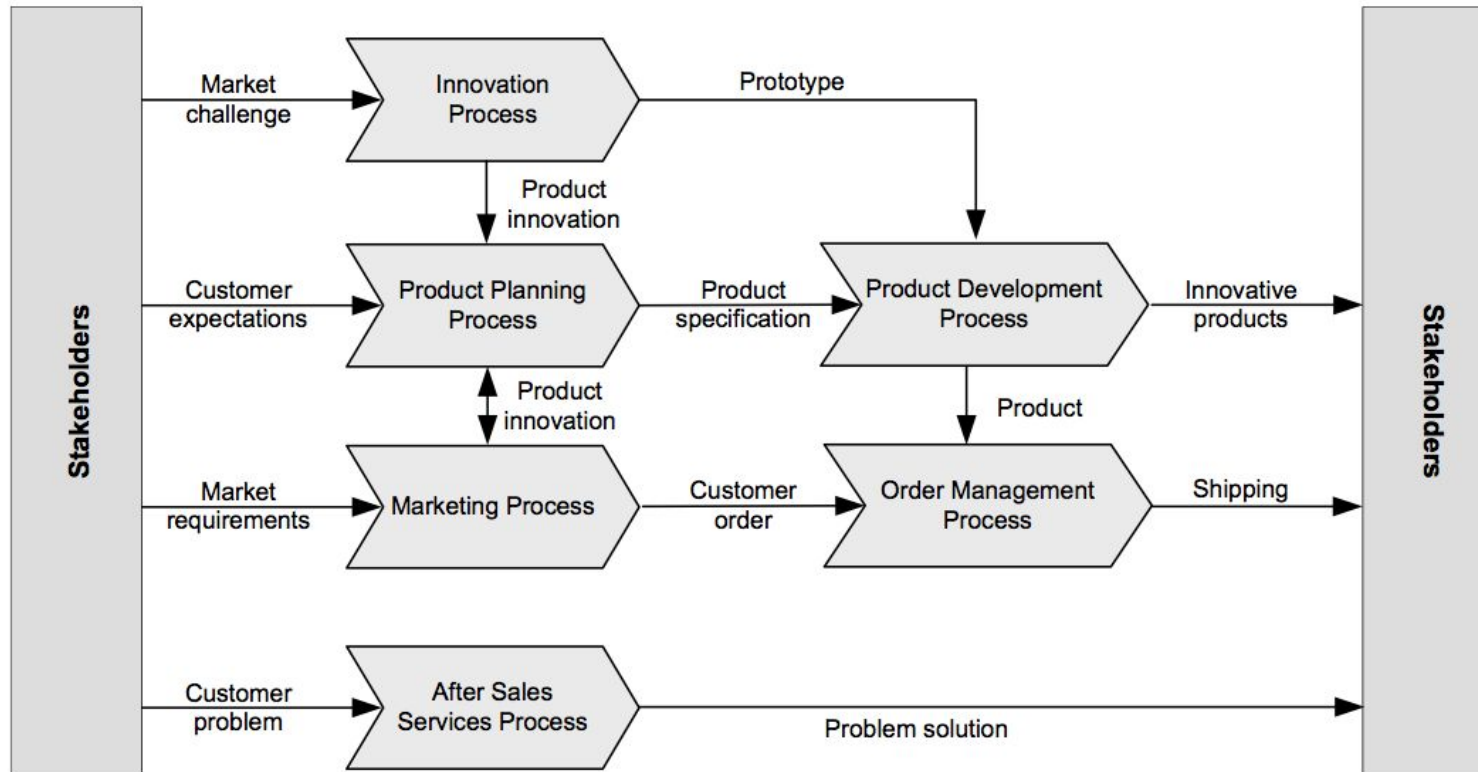
Fig. 2.14. Process landscape relating organizational business processes with stakeholders, based on Schmelzer and Sesselmann (2010)

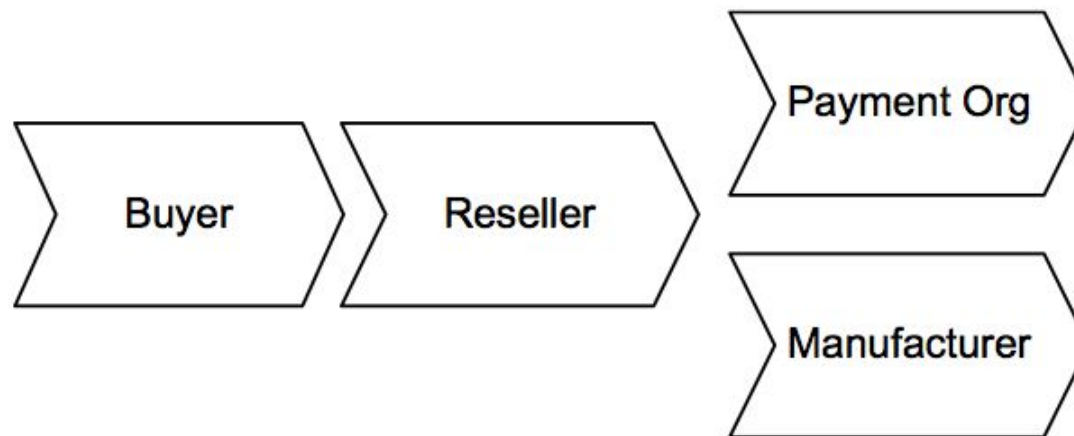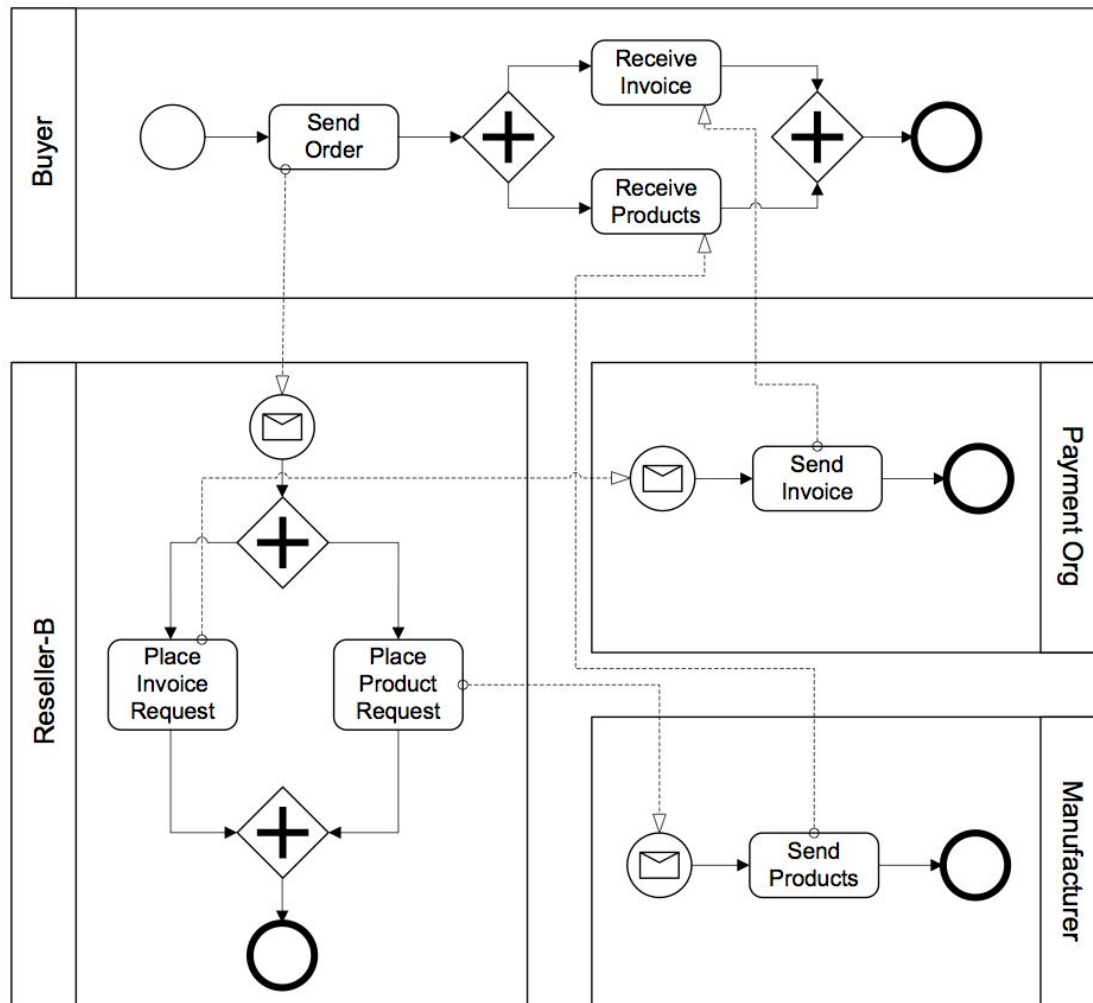**Fig. 2.15.** Sample value system involving multiple companies

Fig. 2.16. Example of business-to-business collaboration through interacting business processes
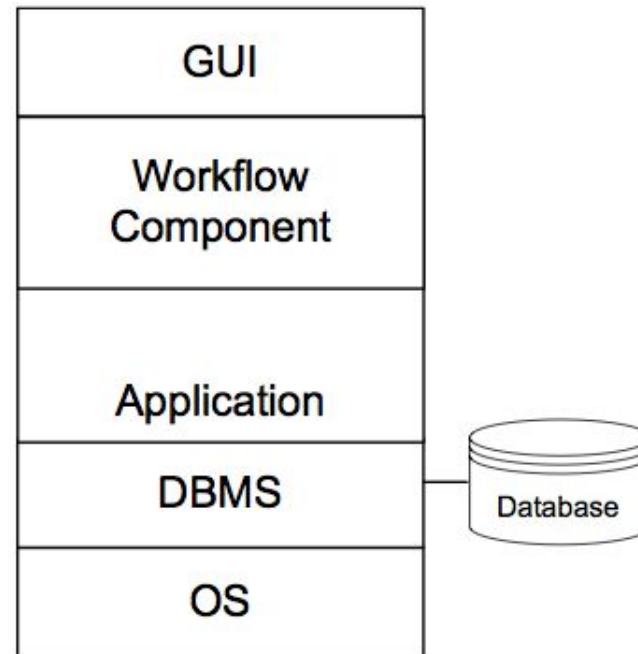
Fig. 2.17. Single-application workflow systems achitecture
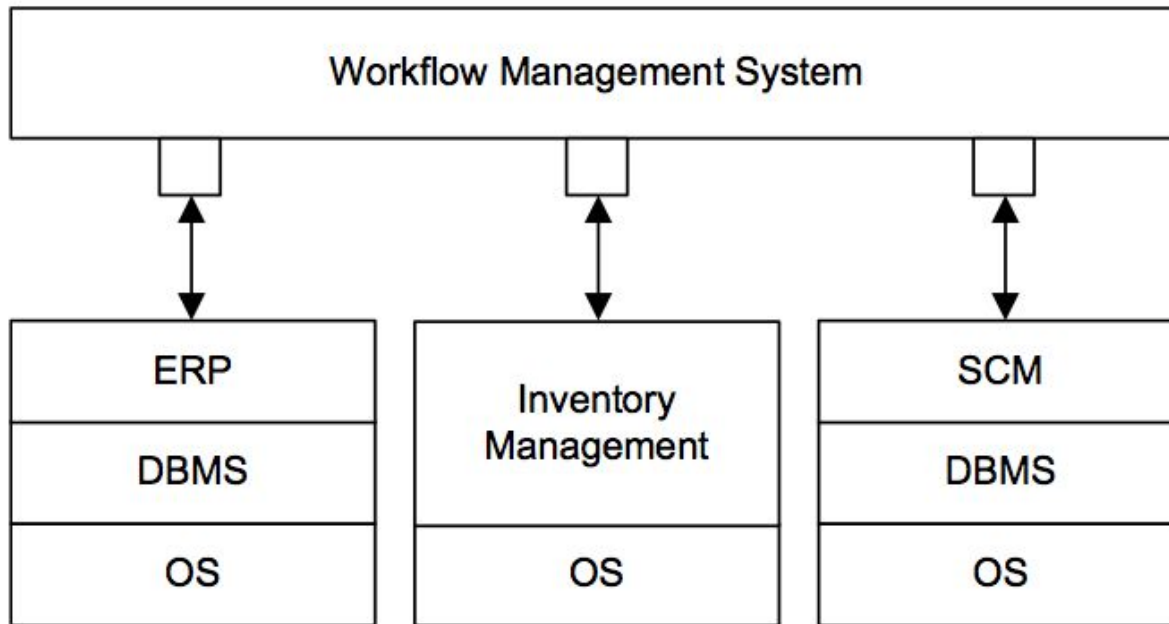
Fig. 2.18. Multiple-application workflow systems architecture
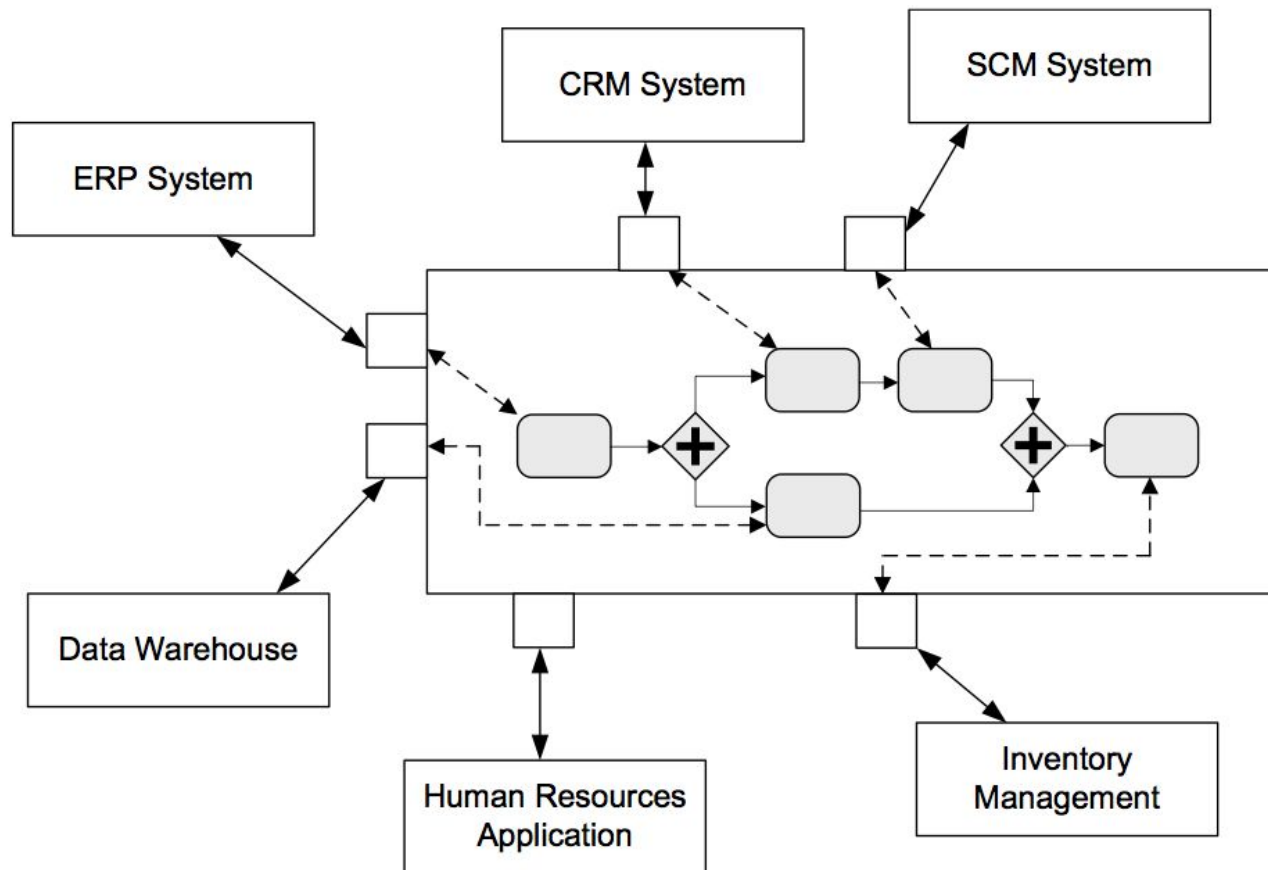
Fig. 2.19. System workflow integration scenario; a process model defines if and when enterprise applications are invoked
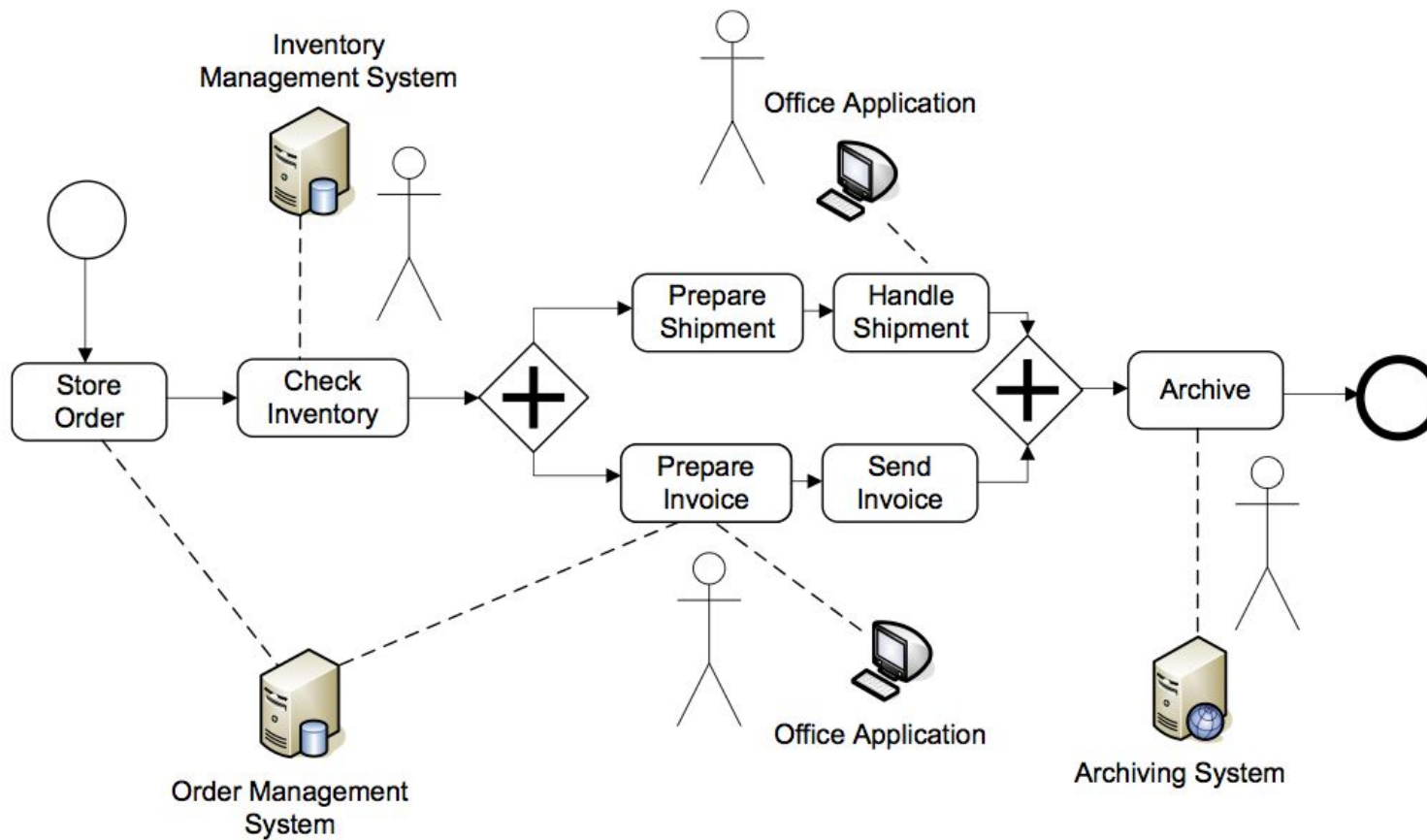
Fig. 2.20. Sample human interaction workflow
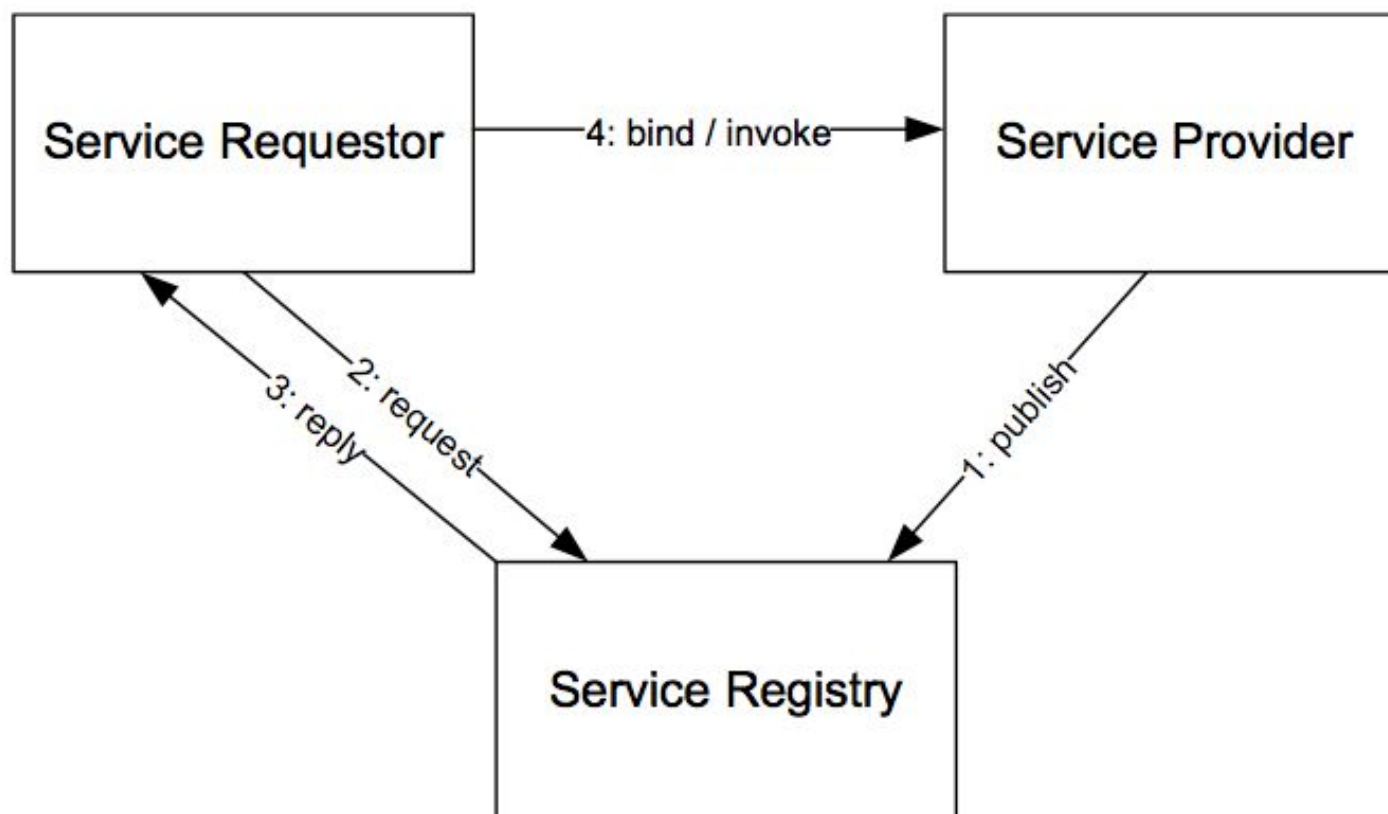
Fig. 2.21. Roles in service-oriented architectures
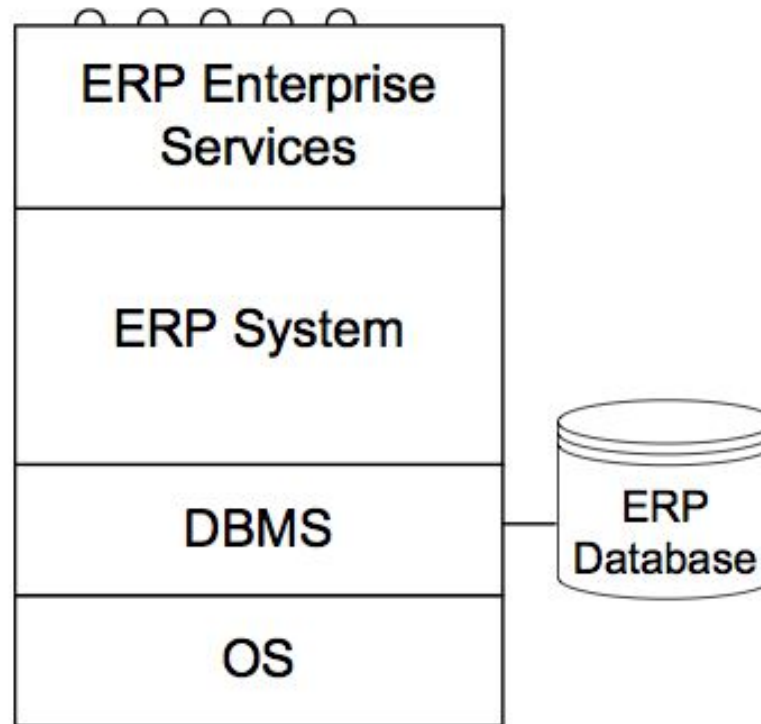
Fig. 2.22. Service-enabled application system
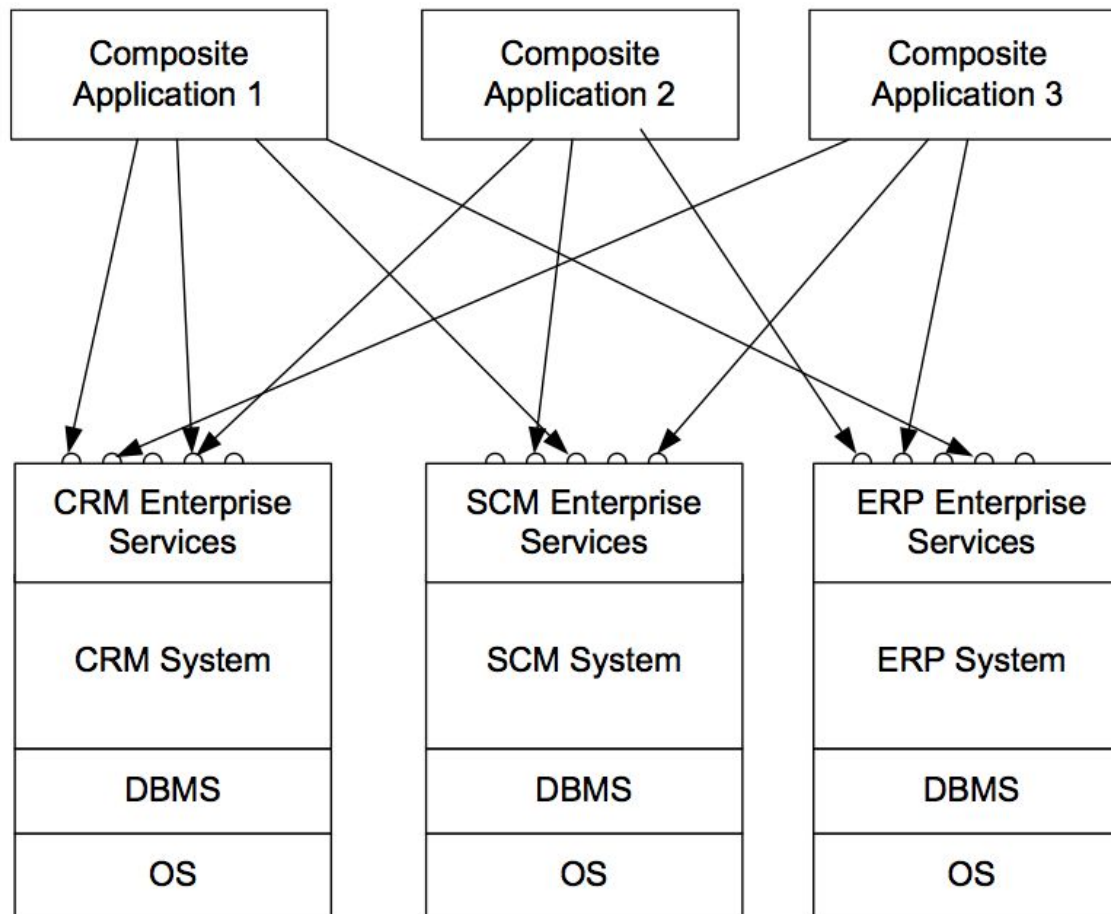
Fig. 2.23. Enterprise systems expose functionality through enterprise services
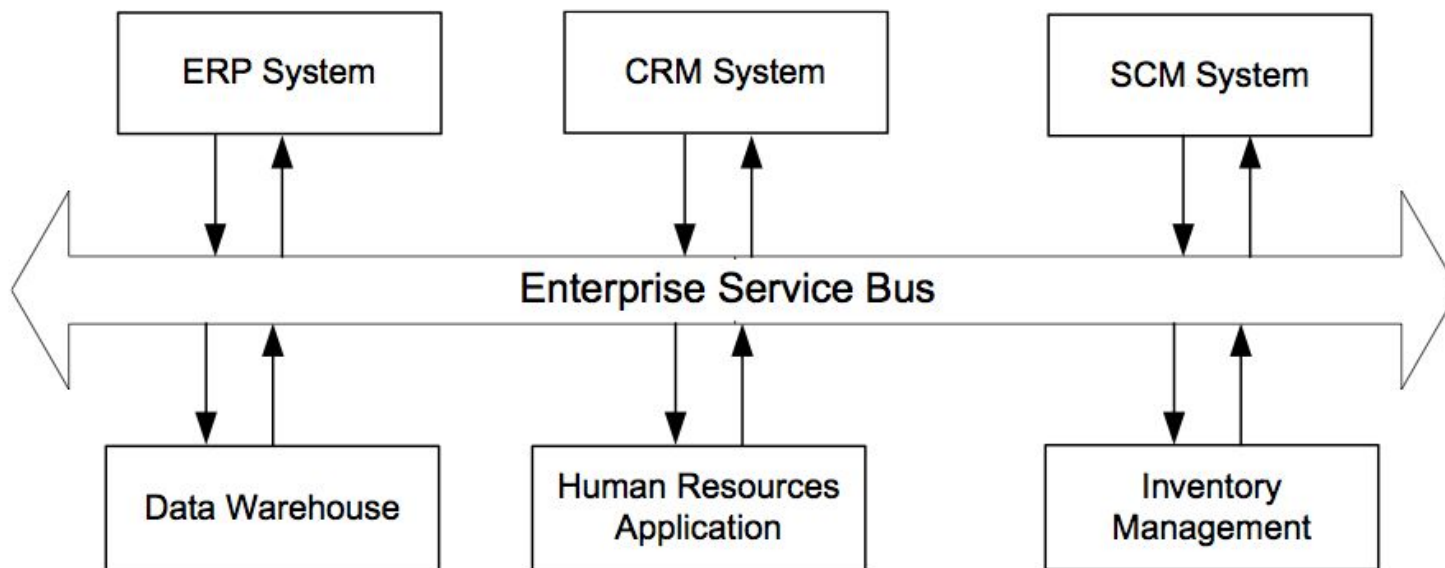
Fig. 2.24. Enterprise service bus
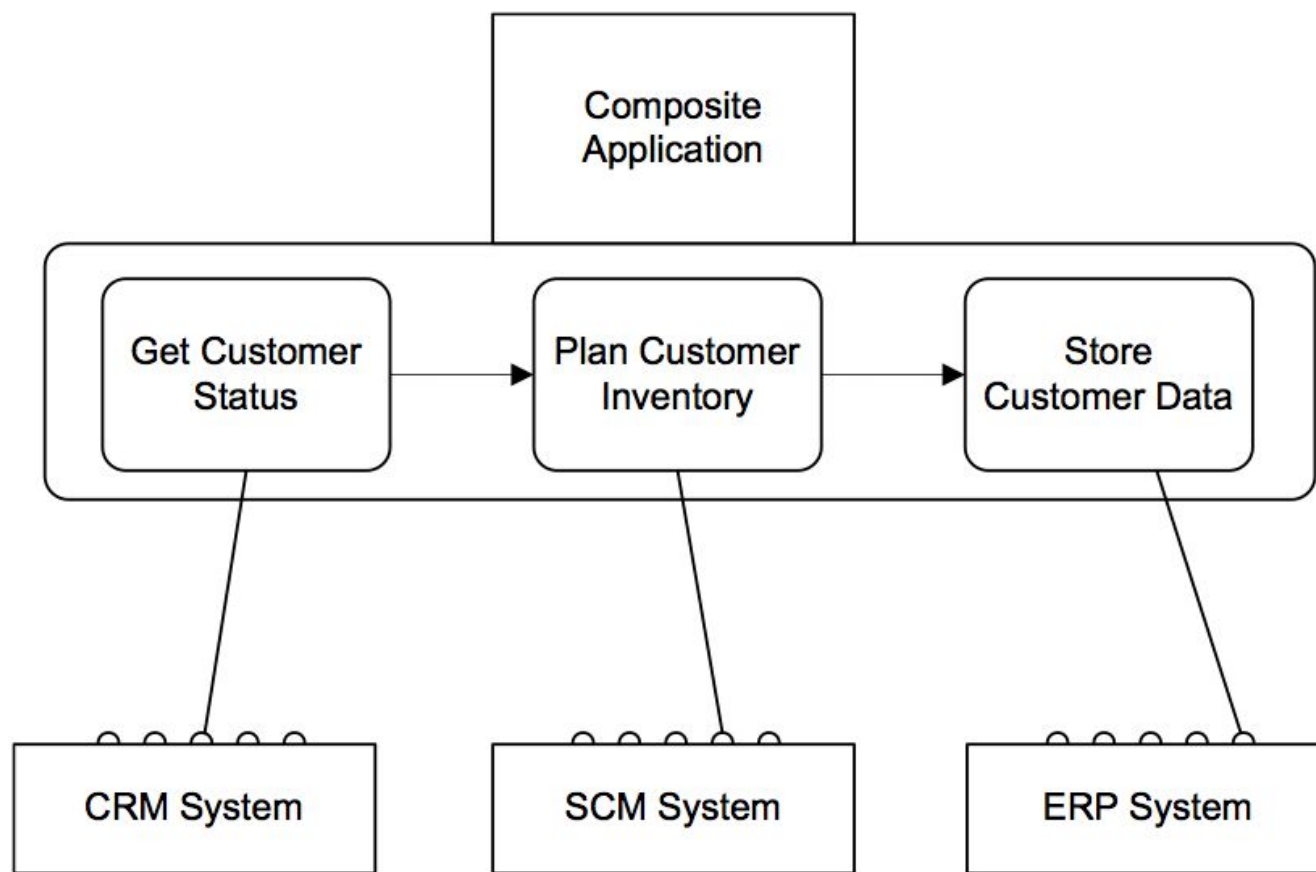
Fig. 2.25. Using service composition to realize composite applications

Fig. 2.26. Business process management landscape