STIKI

SEKOLAH TINGGI INFORMATIKA & KOMPUTER INDONESIA

INFORMATION SYSTEMS ANALYSIS & DESIGN

Information System Building Blocks

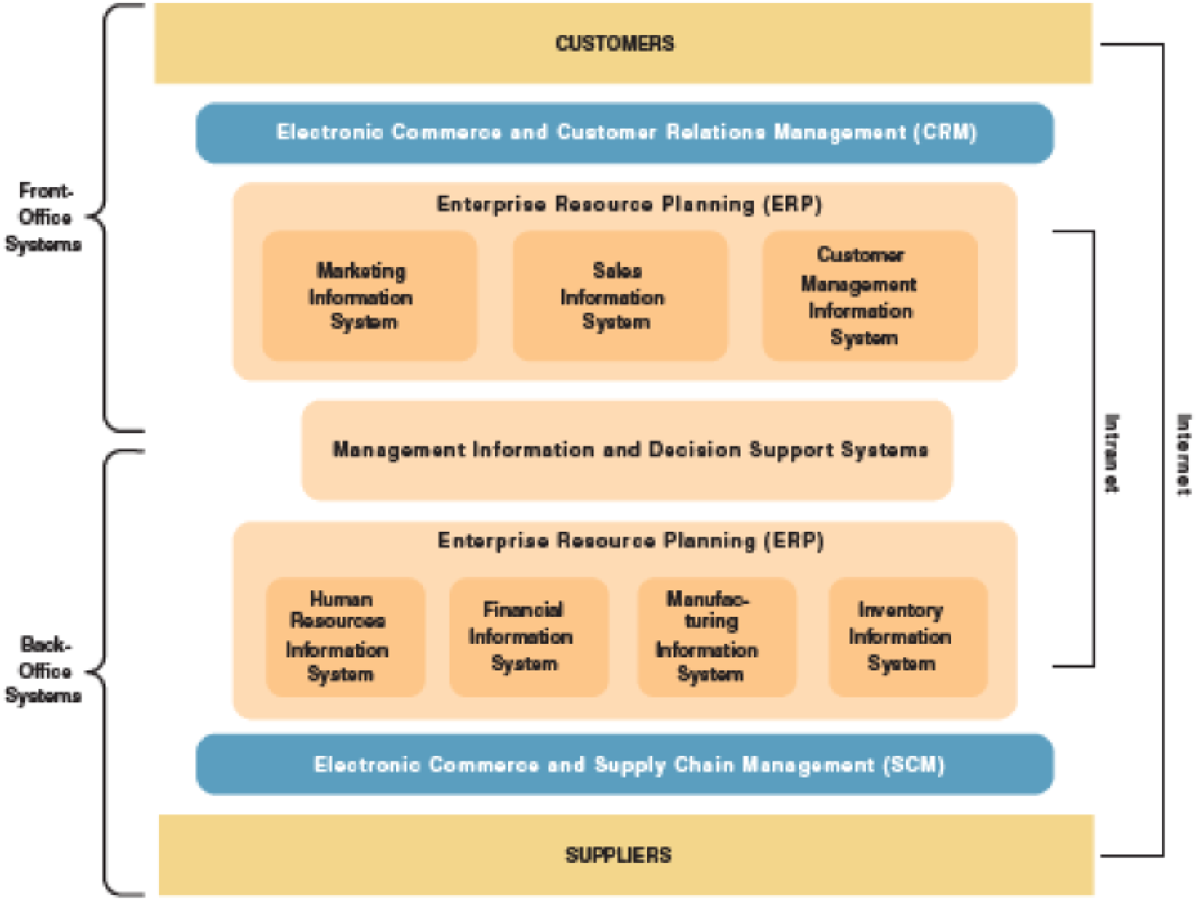
Koko Wahyu Prasetyo, S.Kom., M.T.I.

koko@stiki.ac.id

References

Whitten, J.L., Bentley, L.D. (2011), Chapter 2, *Systems Analysis and Design Methods (p. 6-41, 7th ed*.), McGraw Hill Irwin.

Federation of IS



Front-Office Systems

CUSTOMERS

Electronic Commerce and Customer Relations Management (CRM)

Enterprise Resource Planning (ERP)

- Marketing Information System
- Sales Information System
- Customer Management Information System

Management Information and Decision Support Systems

Back-Office Systems

Enterprise Resource Planning (ERP)

- Human Resources Information System
- Financial Information System
- Manufacturing Information System
- Inventory Information System

Electronic Commerce and Supply Chain Management (SCM)

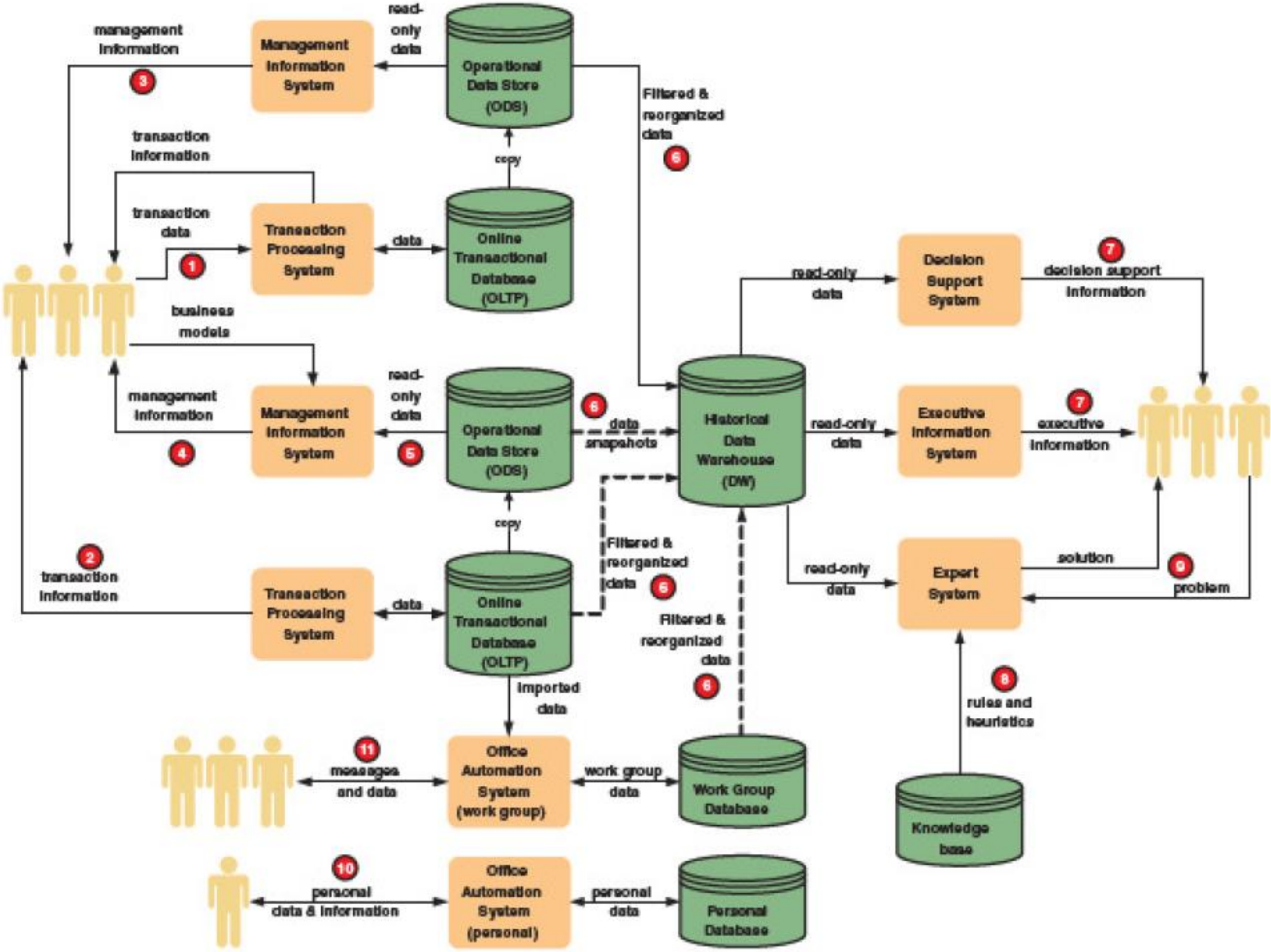
SUPPLIERS

Intranet

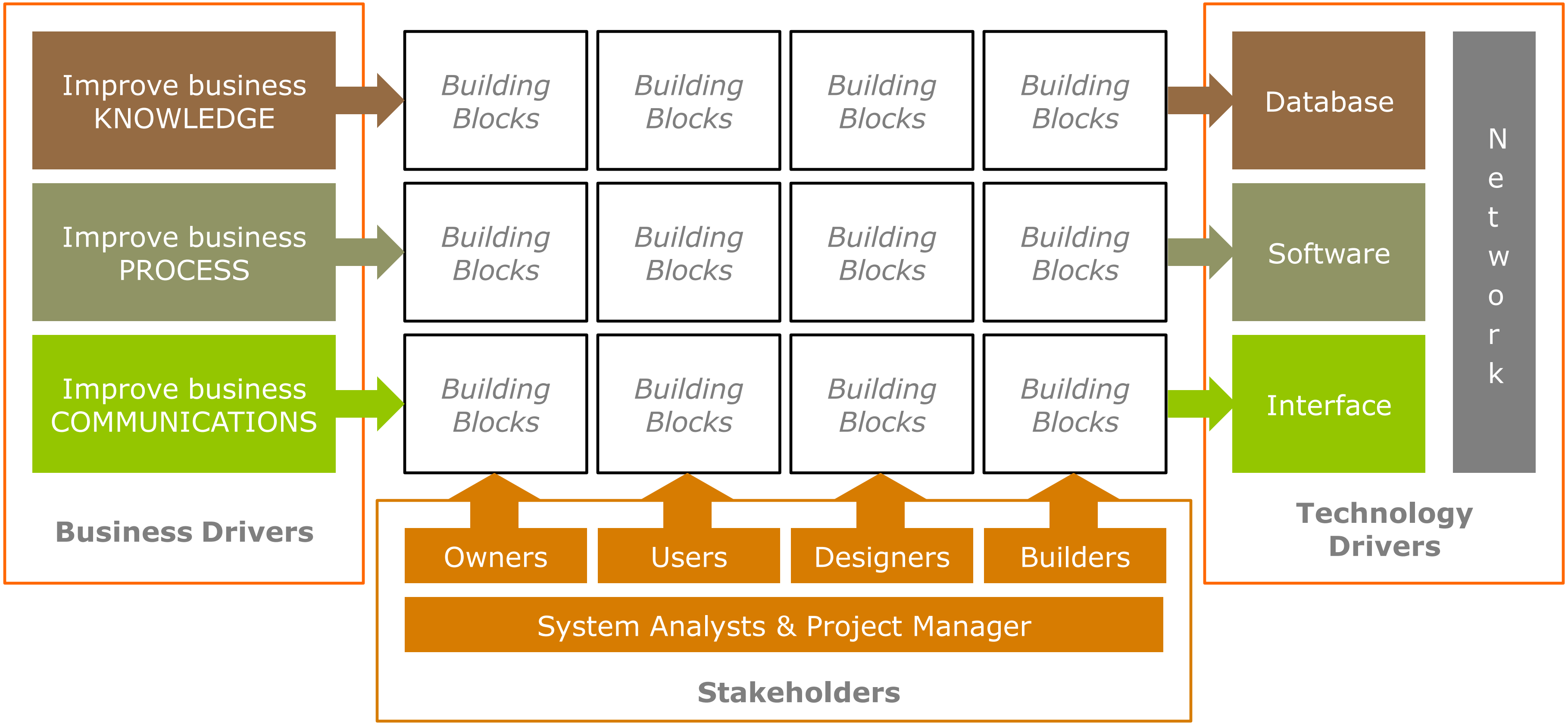
Internet

koko@stiki.ac.id

IS Applications


management information
3
Management Information System
read-only data
Operational Data Store (ODS)
Filtered & reorganized data
6
transaction information
copy
transaction data
1
Transaction Processing System
data
Online Transactional Database (OLTP)
business models
read-only data
Decision Support System
7
decision support information
management information
4
Management Information System
5
read-only data
Operational Data Store (ODS)
6
data snapshots
Historical Data Warehouse (DW)
read-only data
Executive Information System
7
executive information
copy
Filtered & reorganized data
6
2
transaction information
Transaction Processing System
data
Online Transactional Database (OLTP)
read-only data
Expert System
solution
9
problem
Filtered & reorganized data
6
imported data
8
rules and heuristics
11
messages and data
Office Automation System (work group)
work group data
Work Group Database
Knowledge base
10
personal data & information
Office Automation System (personal)
personal data
Personal Database

IS Perspectives and Focuses



Improve business KNOWLEDGE

Improve business PROCESS

Improve business COMMUNICATIONS

Business Drivers

Building Blocks	*Building Blocks*	*Building Blocks*	*Building Blocks*
Building Blocks	*Building Blocks*	*Building Blocks*	*Building Blocks*
Building Blocks	*Building Blocks*	*Building Blocks*	*Building Blocks*

Owners

Users

Designers

Builders

System Analysts & Project Manager

Stakeholders

Database

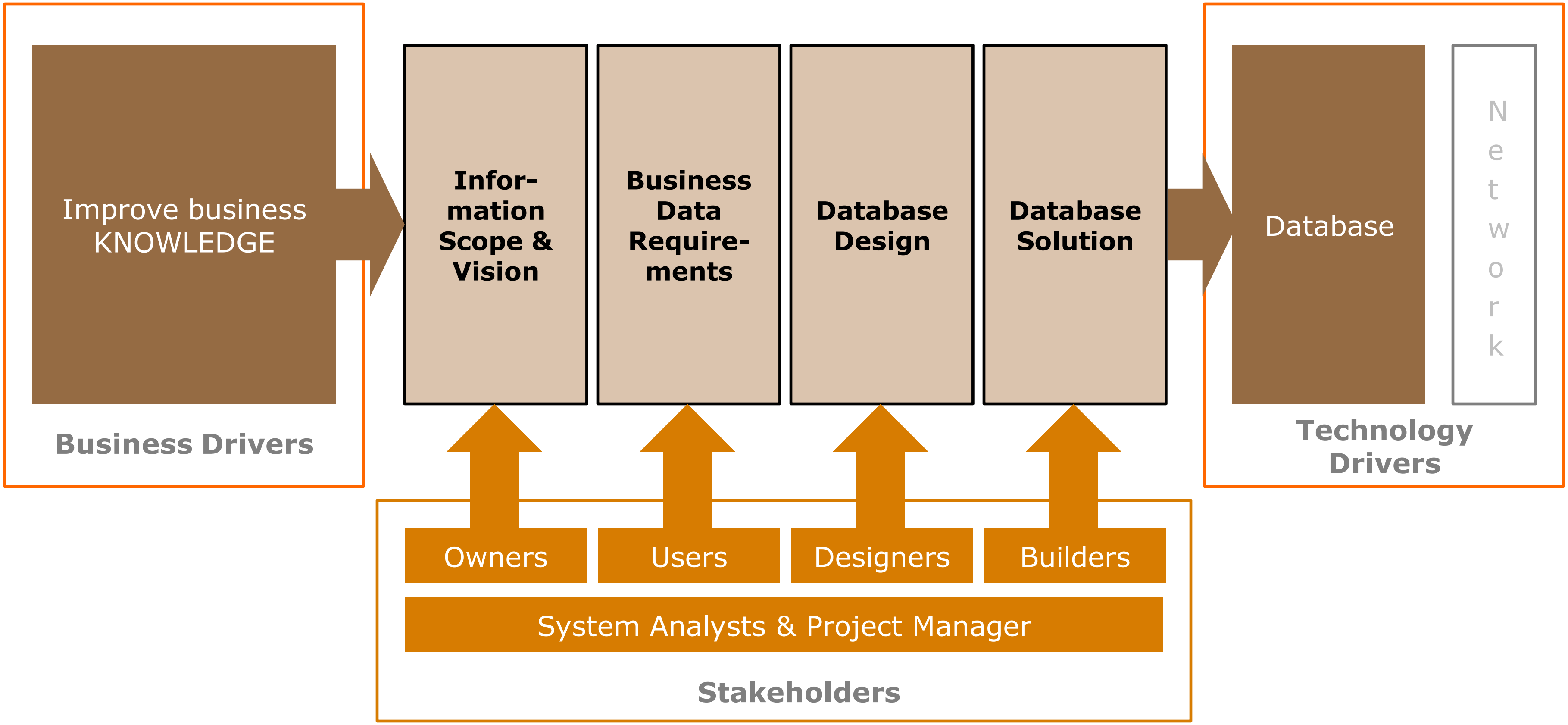
Software

Interface

Network

Technology Drivers

Knowledge Perspective



Improve business KNOWLEDGE

Business Drivers

Infor-mation Scope & Vision

Business Data Require-ments

Database Design

Database Solution

Database

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Technology Drivers

Owners

Users

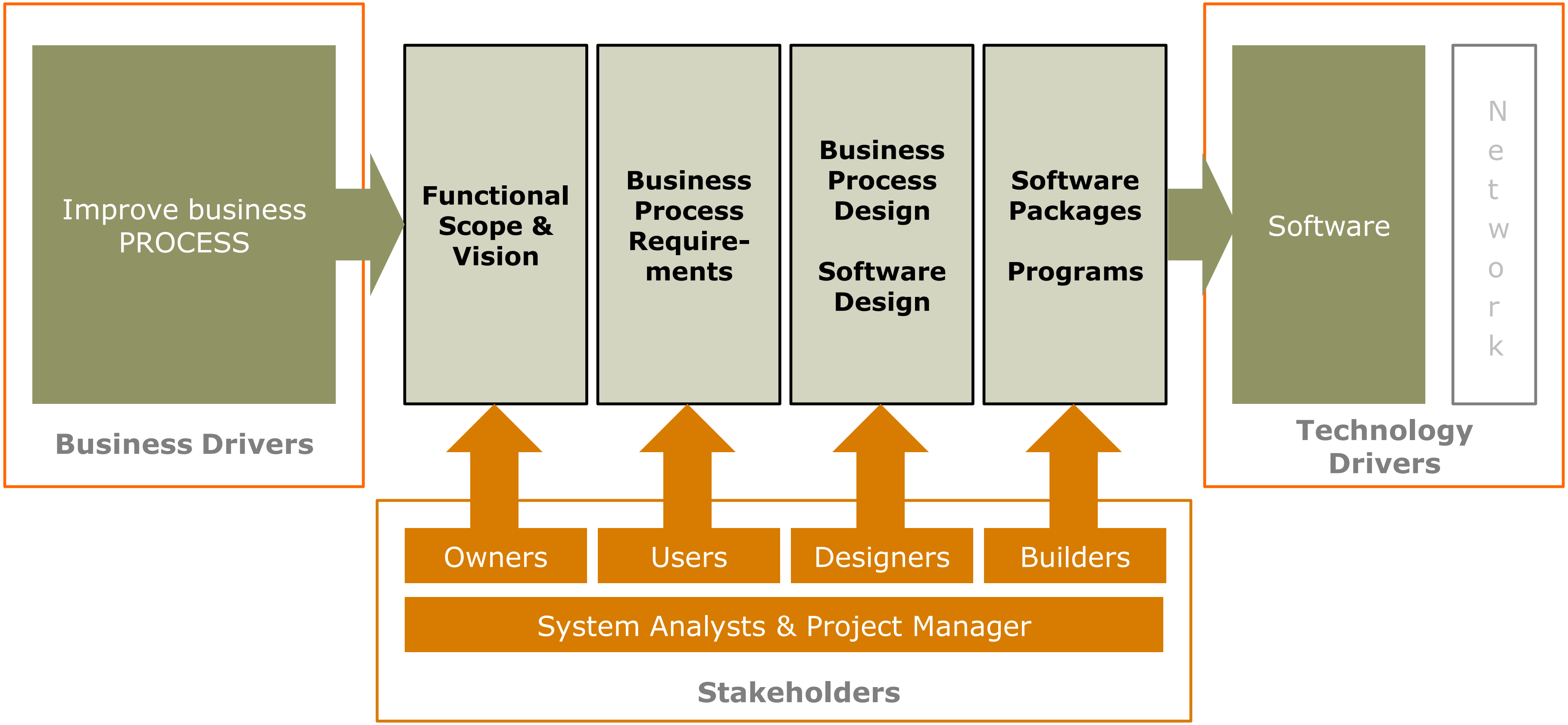
Designers

Builders

System Analysts & Project Manager

Stakeholders

Process Perspective



Improve business PROCESS

Business Drivers

Functional Scope & Vision

Business Process Require-ments

Business Process Design

Software Design

Software Packages

Programs

Software

Network

Technology Drivers

Owners

Users

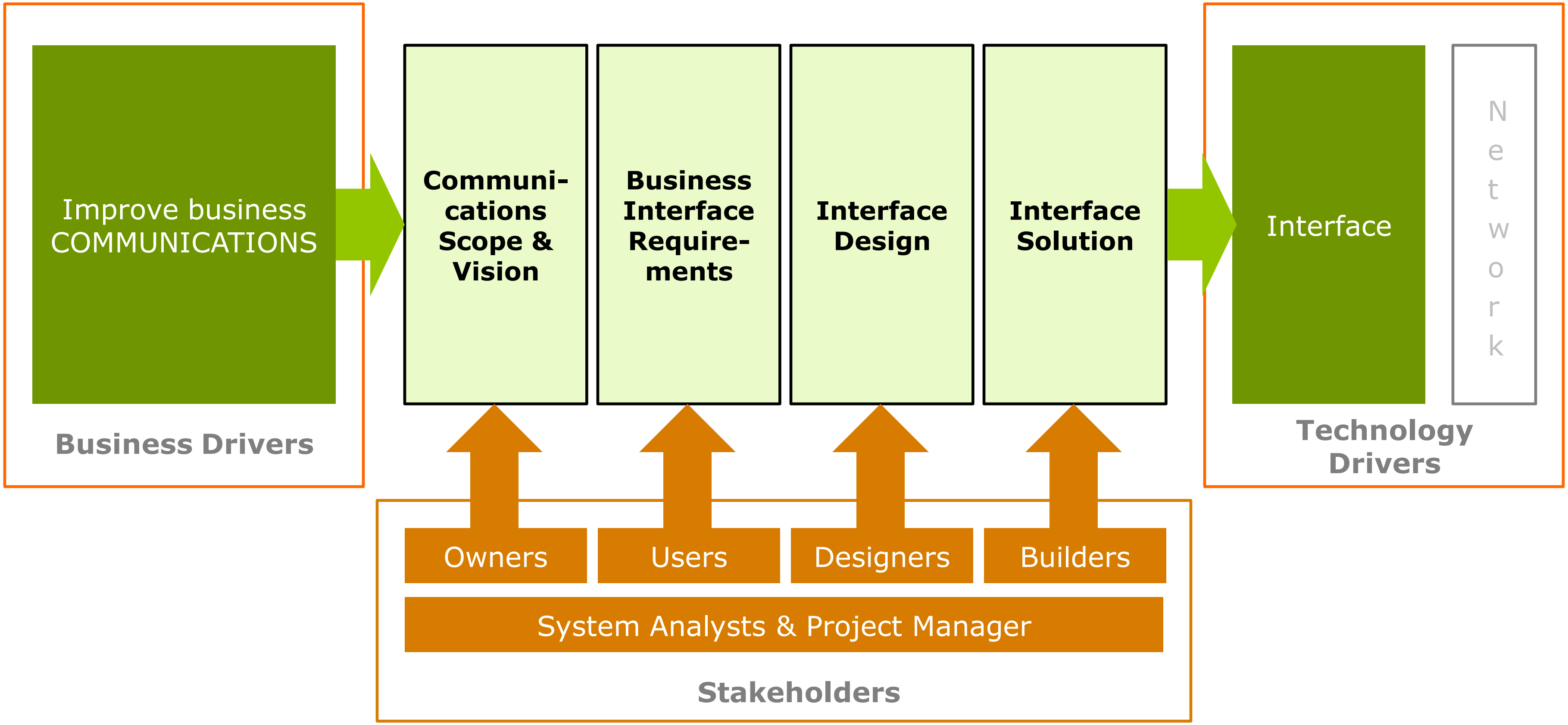
Designers

Builders

System Analysts & Project Manager

Stakeholders

Communications Perspective



Improve business COMMUNICATIONS

Business Drivers

Communi-cations Scope & Vision

Business Interface Require-ments

Interface Design

Interface Solution

Interface

Network

Technology Drivers

Owners

Users

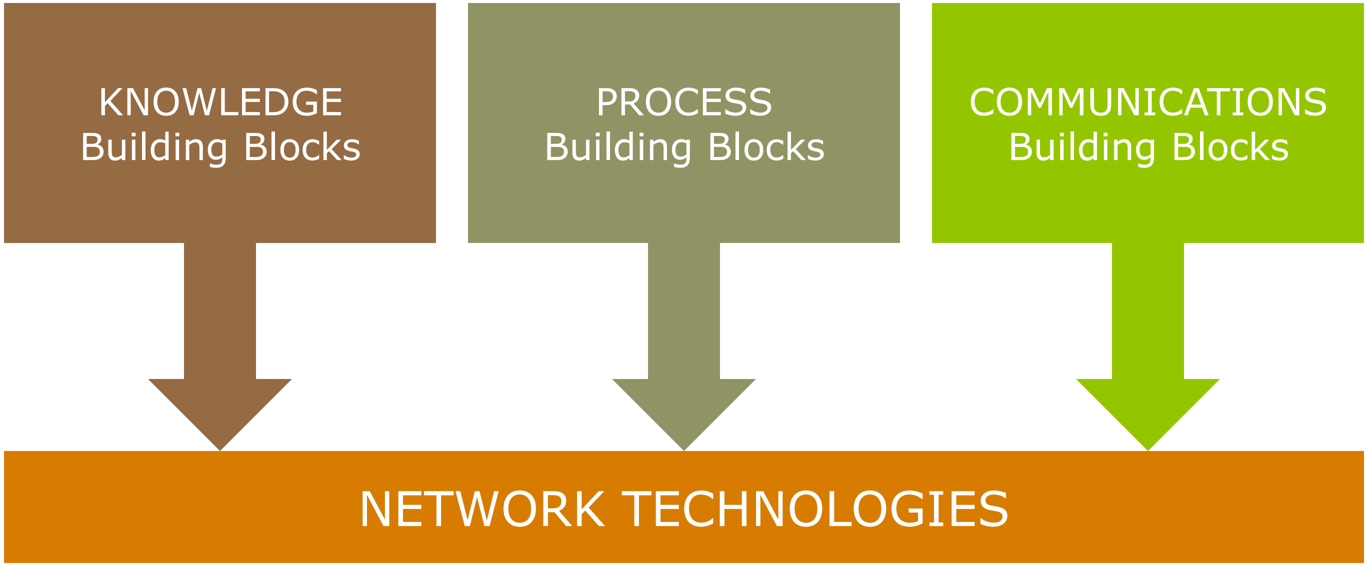
Designers

Builders

System Analysts & Project Manager

Stakeholders

Network Roles



KNOWLEDGE
Building Blocks

PROCESS
Building Blocks

COMMUNICATIONS
Building Blocks

NETWORK TECHNOLOGIES

Thank you!

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koko@stiki.ac.id