Figure 5.1 Chart decomposing an organization into its component bodies.
Use-Case Diagram

Student Registration System

student

register for classes

Admission and records

generate classlists

billing system
Use-Case Diagram

Video System

vendors

place video in system

become a member

customer

rent a video

return a video

employee

update/remove members

manager

set video type/price

update/remove videos

produce reports
Use-Case Diagram

Railroad Ticket System
Use-Case Diagram

Newspaper Delivery System

customer

maintain subscriptions

cancel for vacations

accept payment

produce daily lists

produce bills

delivery person

produce summary report

manager
Use Case Diagram
SafeHome Security as a Non-Embedded System

homeowner

Accept Commands

Setup System

Security System

Alarm

sensors

Monitor Status
SafeHome – Embedded System
Use Case Diagram
Use-Case Diagram

Simplified Inventory System
Context Diagram

Simplified Student Registration System
Context Diagram
Lecture Presentation System

User → command → Slide Show System → response → User
Context Diagram
Lecture Presentation System

User

command

lecture notes

Slide Show System

display notes

slides

handouts

User
Context Diagram

Simplified Student Registration System -2-
Railroad Ticket System

Passenger

destination

pin #

credit card

ticket

Ticket System

destinations

verification

various credit companies files

member's credit standing

Credit Card Companies

Credit Card #
Pin #
Ticket Cost

Railroad

schedules

accounting
prices
info
Customer

available publications

subscriptions and personal info

payment

customer

donations

vacations

available publications

Available publications

Orders

Publishers

Delivery Person

daily delivery list

bills

summary listing

Newsagent

Newspaper Delivery System

News Delivery System

Context Diagram
Safehome Software -- Embedded System

Control Panel Keypad

user commands and data

Assigned Numbers

Sensors

Dial tone

Telephone Line

Alarm

Control panel Display

Safehome Software

alarm type
display info

telephone number tones

sensor status
Context Diagram
Simplified Inventory System

Vendors

Shop Floor Workers

Inventory System

orders

order file

reorder request

general ledger

Purchasing

Accounting

part ordered?

payment

requisition

payment made

invoice

unordered parts

parts

stock parts