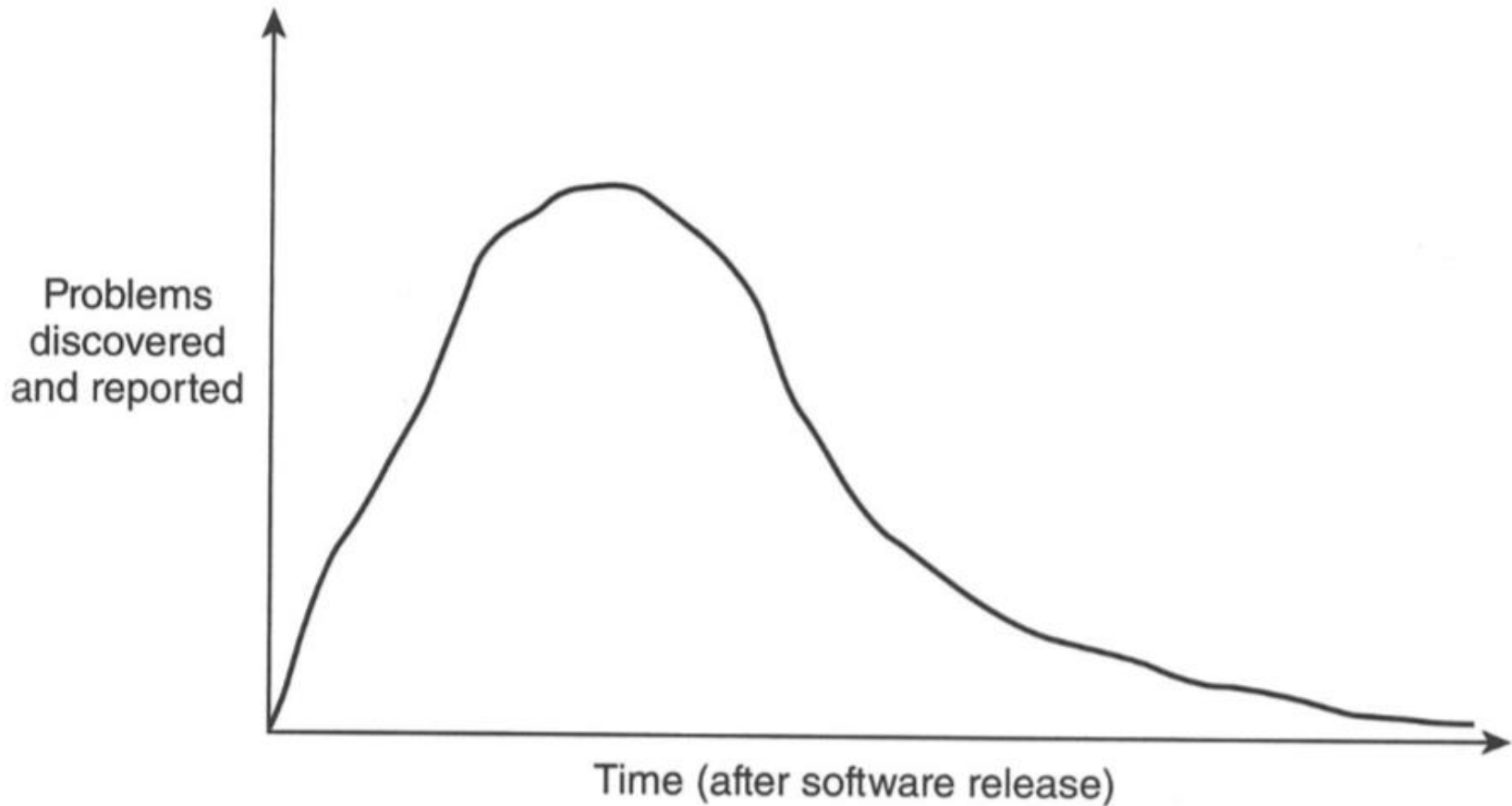


Chapter 12 – Software  
Support and  
Maintenance

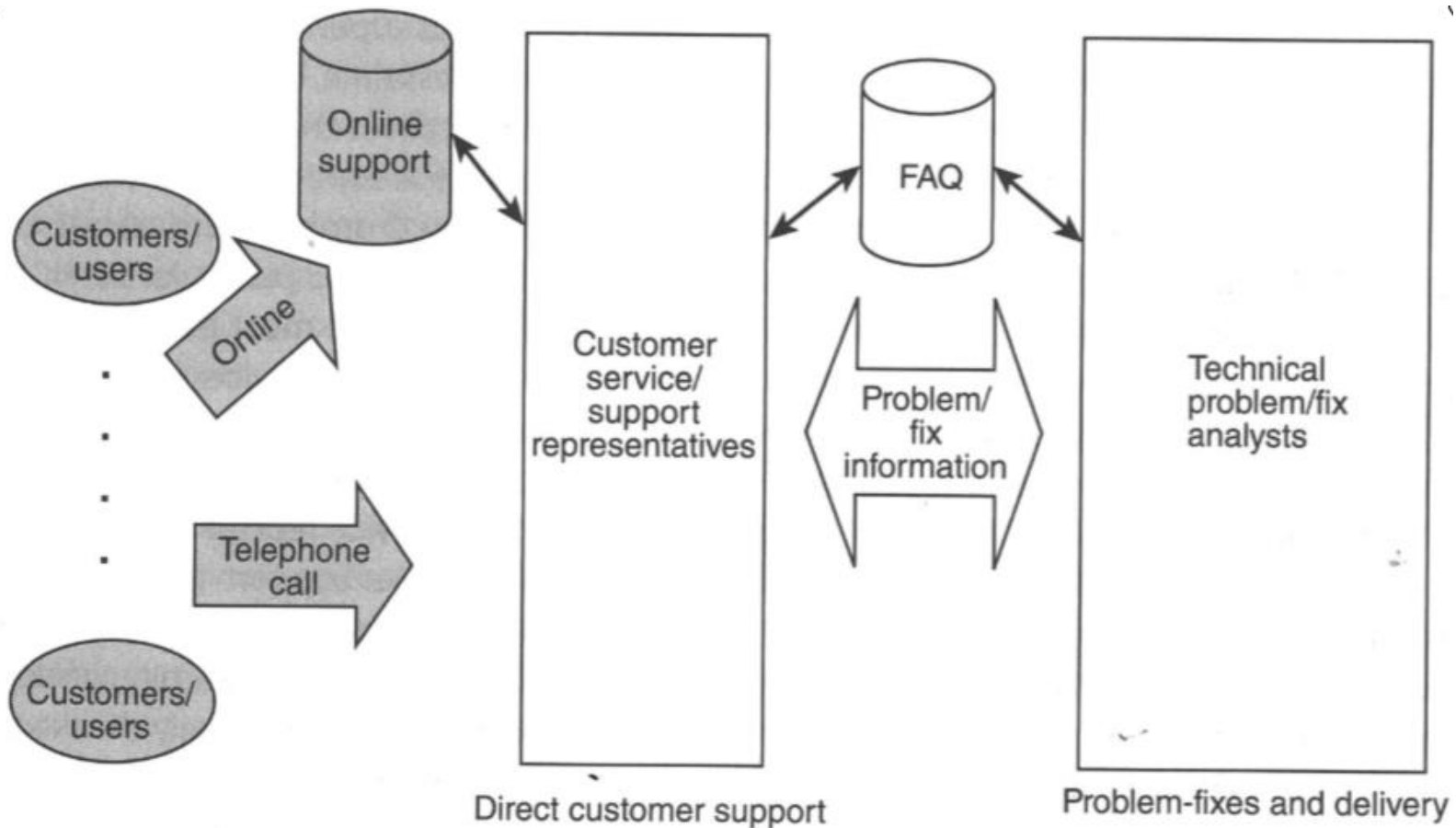
# Software Engineering

# Timing of Error Discovery



**Figure 12.1** A Rayleigh curve illustrating problem arrival.

# Customer Service and Support



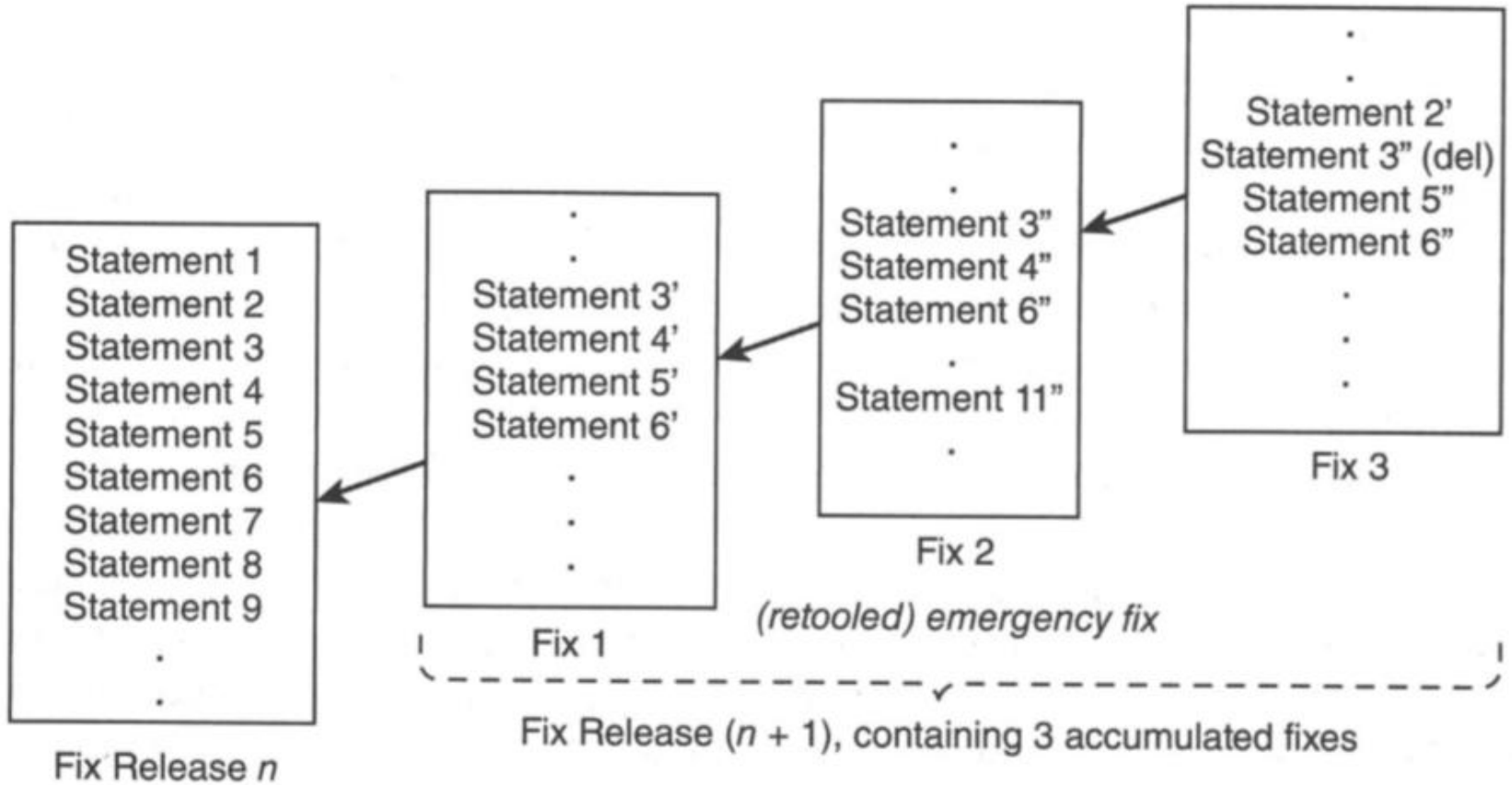
**Figure 12.2** A typical customer service and support organization.

# Problem Priority Levels

**Table 12.1** Sample Problem Priority Levels

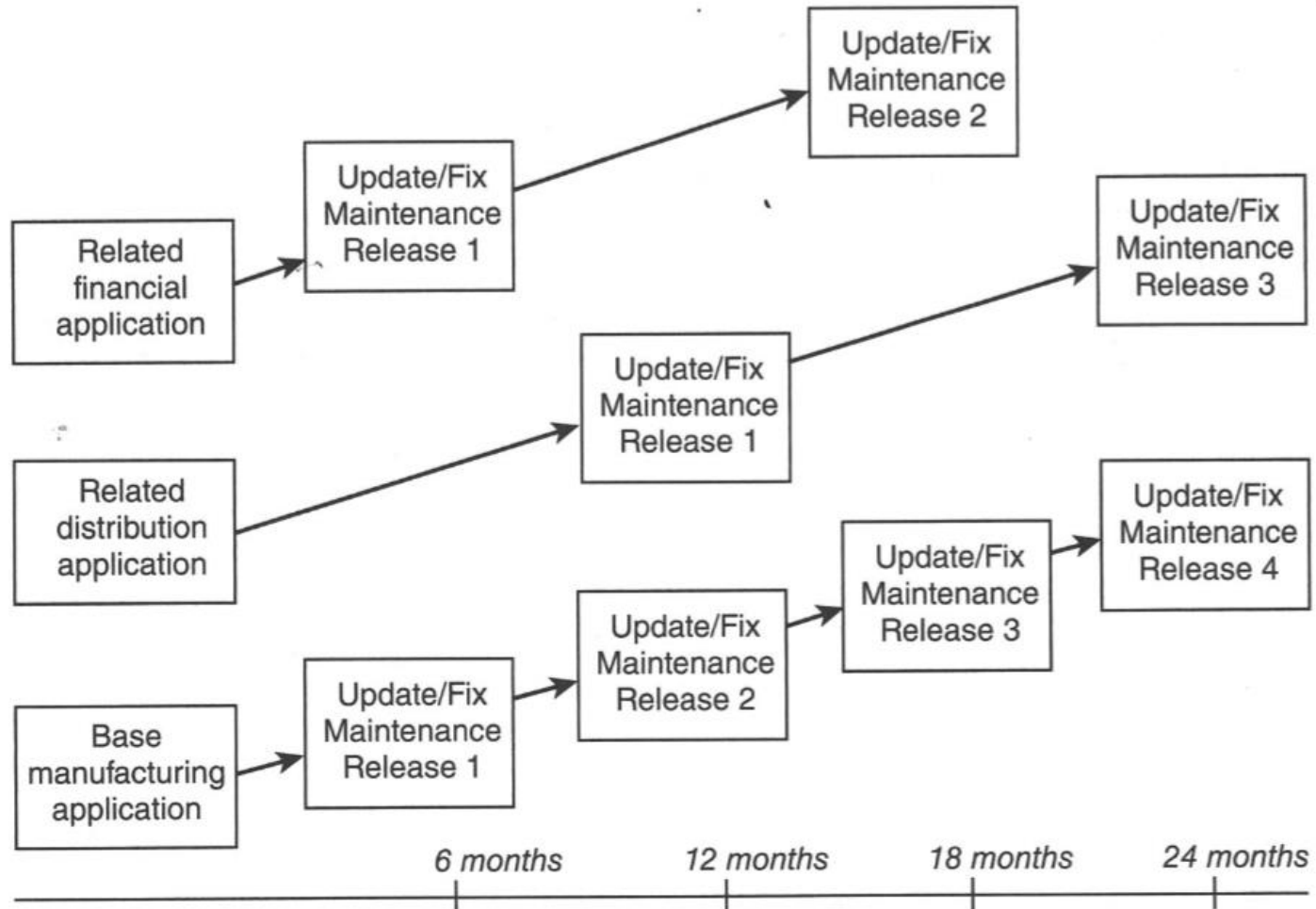
Priority Level	Problem Category	Fix Response Time
1	Severe functional problem with no work-around	As soon as possible
2	Severe functional problem but has a work-around	1-2 weeks
3	Functional problem that has a work-around	3-4 weeks
4	Nice to have or to change	Next product release or earlier

# Fix Overlay Problem



**Figure 12.3** Fix overlay problem.

# Multiple-Product Fix Releases



**Figure 12.4** Multiple-product fix releases.

# Maintenance Change Request Form

Change request number: _____	Request date: _____	
Requestor name: _____	Request status: _____	Accepted date: _____
Requestor priority: <i>High, Medium, Low</i>		Rejected date: _____
		Processing start date: _____
		Completion date: _____
Brief change request description: _____		
_____		
_____		
_____		
Areas impacted by the change request: _____		
_____		
_____		
_____		
Estimated effort: _____	Inclusion in maintenance Rel.#: _____	

**Figure 12.5** Sample maintainancy change request form.



# Change Control Process Document Sections (Wiegers)

1. Purpose and scope
  2. Roles and responsibilities
  3. Change request states
  4. Entry criteria
  5. Tasks
    - 5.1 Evaluate change request
    - 5.2 Make change decision
    - 5.3 Implement the change
    - 5.4 Verify the change
  6. Exit criteria
  7. Change control status reporting
- Appendix: Attributes stored for each request

**FIGURE 28-1** Sample template for a change control process description.

<https://www.amazon.com/Software-Requirements-Developer-Best-Practices/dp/0735679665>



# Change Request Control (Wiegiers)

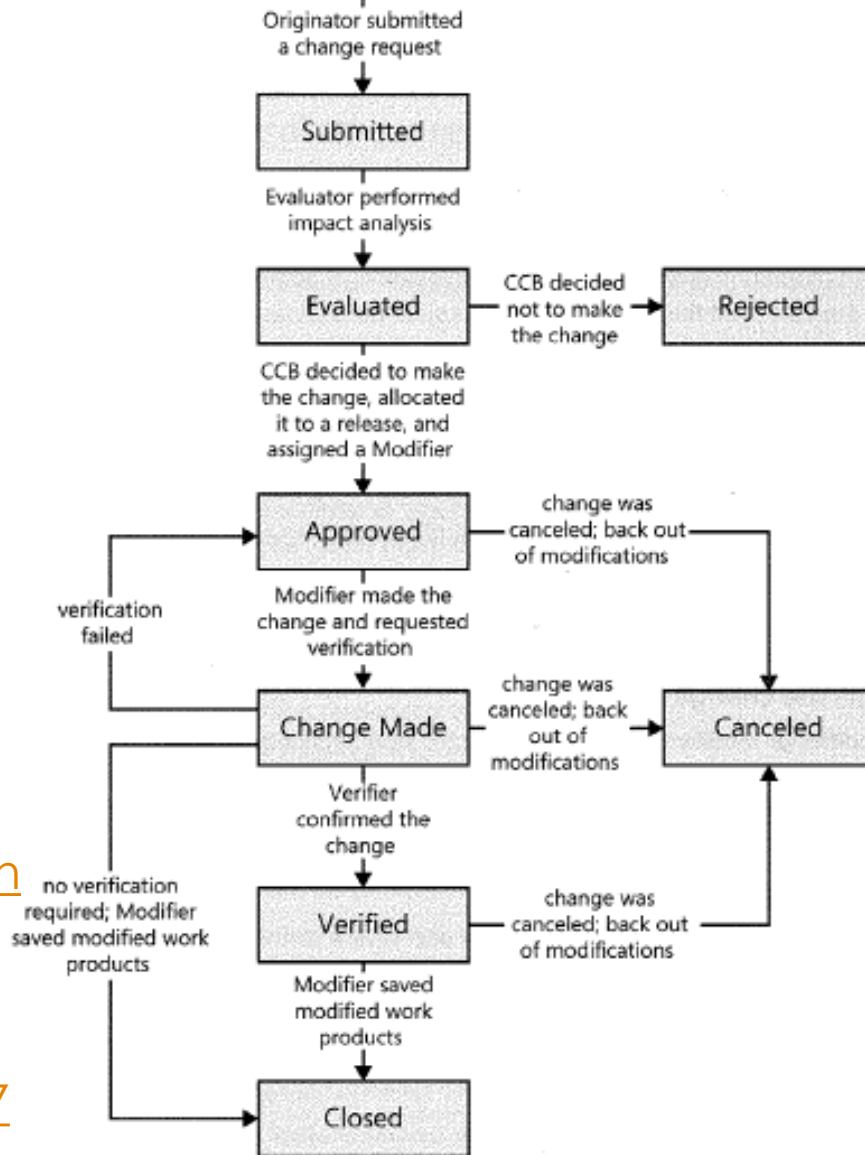
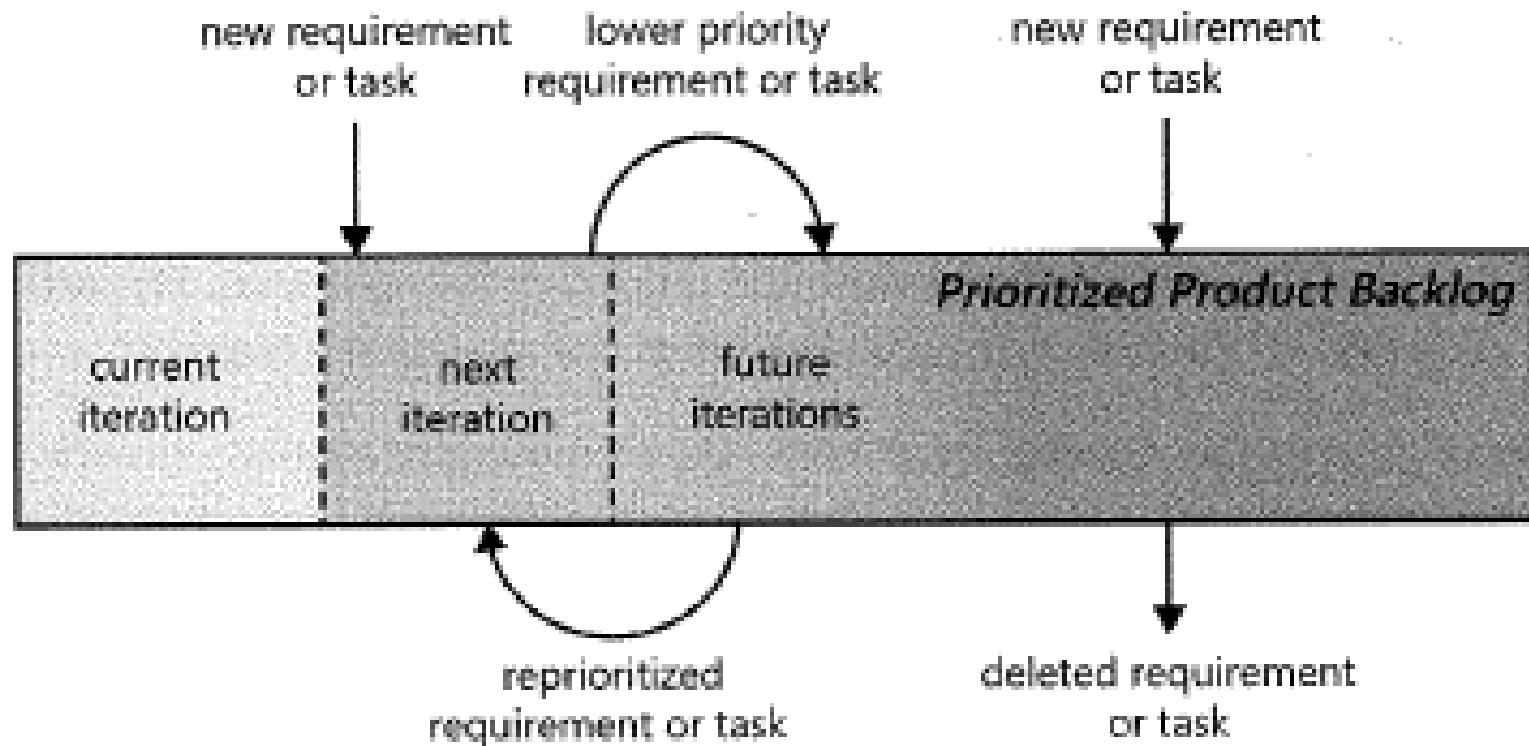


FIGURE 28-2 State-transition diagram for a change request.

<https://www.amazon.com/Software-Requirements-Developer-Best-Practices/dp/0735679665>

# Agile Project with Project Backlog (Wiegers)



**FIGURE 28-9** Agile projects manage change with a dynamic product backlog.

<https://www.amazon.com/Software-Requirements-Developer-Best-Practices/dp/0735679665>