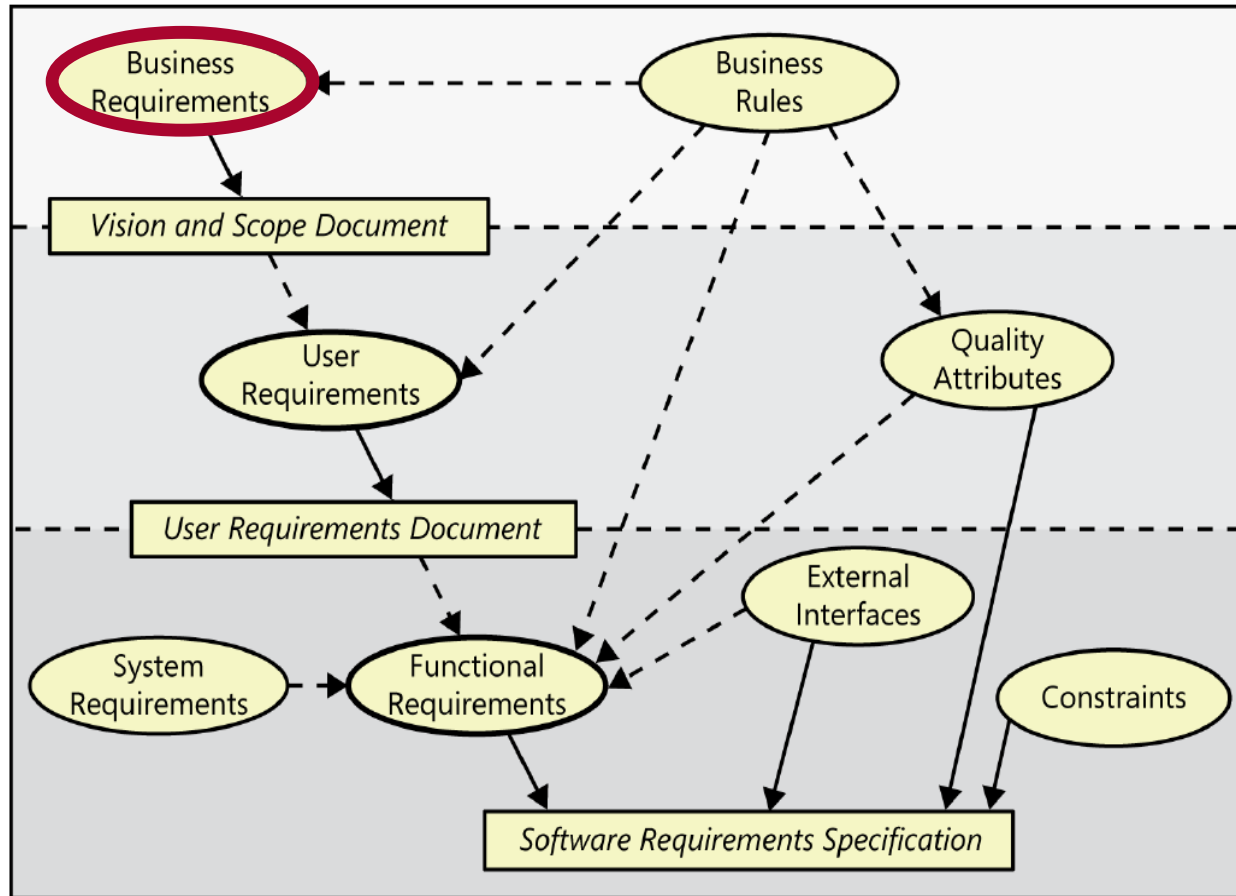


CS445 / ECE451 / CS645 / SE463
Software Requirements Specification & Analysis

Business Requirements



Business Requirements

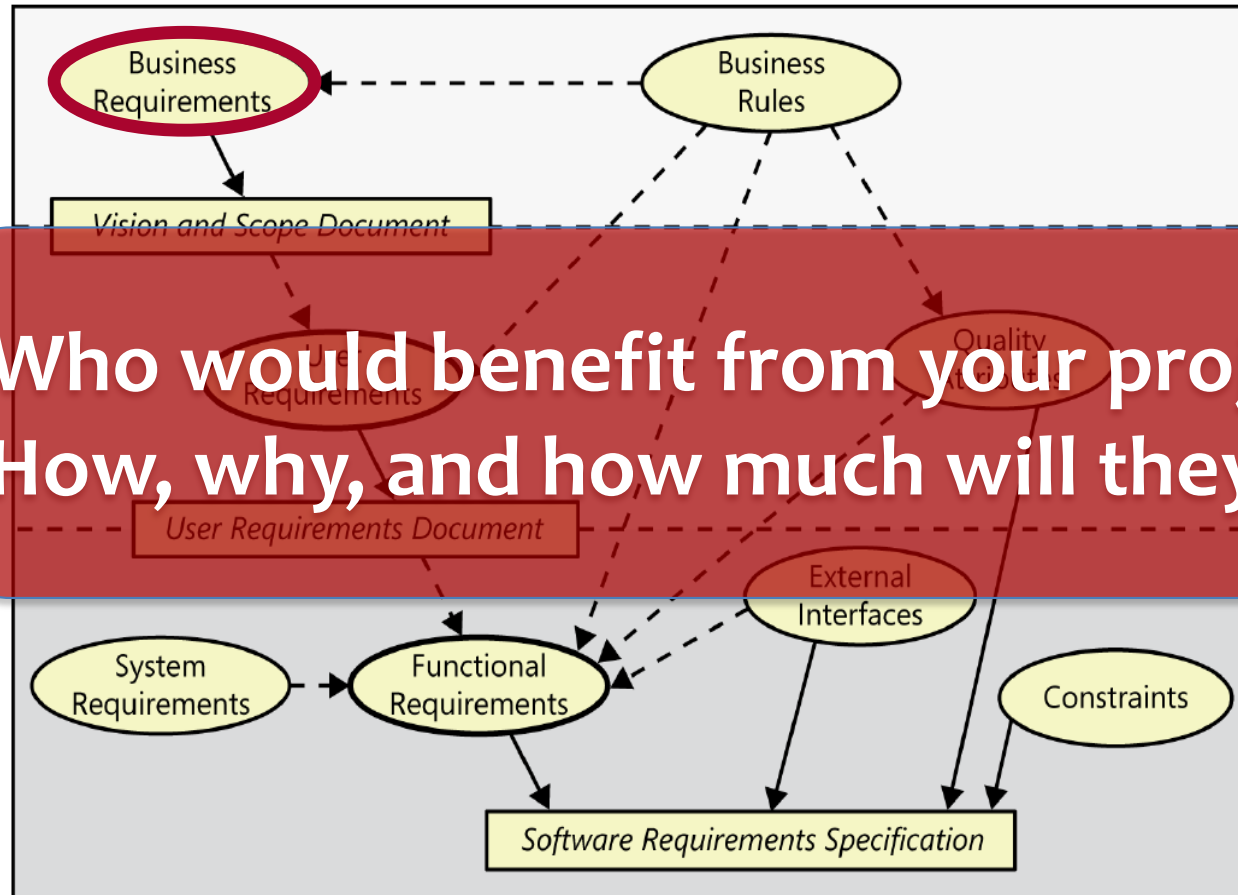


Airline wants to reduce counter staff costs by 25%

FIGURE 1-1 Relationships among several types of requirements information. Solid arrows mean "are stored in"; dotted arrows mean "are the origin of" or "influence."

Karl E. Wieggers and Joy Beatty. *Software Requirements, 3ed.* Microsoft Press, 2013.

Business Requirements



Airline wants to reduce counter staff costs by 25%

Who would benefit from your project?
How, why, and how much will they benefit?

FIGURE 1-1 Relationships among several types of requirements information. Solid arrows mean “are stored in”; dotted arrows mean “are the origin of” or “influence.”

Karl E. Wieggers and Joy Beatty. *Software Requirements, 3ed.* Microsoft Press, 2013.

Business Requirements

Different types of business requirements

- Better solution to an existing problem
 - Better performance
 - More (desired) features
 - Easier to learn and use
- Cheaper solution to an existing problem
 - GoogleDocs, GoogleSheets
- Automated solution to a manual task
 - QR codes
- Specialized solution for a niche user base
 - Square
 - Baidu, Yandex, Kaixin
- New product for a completely new market segment
 - Slack, Groupon, ipad

Existing Market

	Existing Market	Re-segmented Market	New Market
Customers	known	generally known	unknown
Customer Needs	performance	better fit	transformational improvement
Competitors	many	few	none
Risk	lack of branding, noncompetitive sales and distribution ecosystem	market and product redefinition	
Examples	Google	GoogleDocs GoogleSheets AirBnB	Slack Groupon

Re-segmented Market

	Existing Market	Re-segmented Market	New Market
Customers	known	generally known	unknown
Customer Needs	performance	better fit	transformational improvement
Competitors	many	few	none
Risk	lack of branding, noncompetitive sales and distribution ecosystem	market and product redefinition	
Examples	Google	GoogleDocs GoogleSheets AirBnB	Slack Groupon

New Market

	Existing Market	Re-segmented Market	New Market
Customers	known	generally known	unknown
Customer Needs	performance	better fit	transformational improvement
Competitors	many	few	none
Risk	lack of branding, noncompetitive sales and distribution ecosystem	market and product redefinition	
Examples	Google	GoogleDocs GoogleSheets AirBnB	Slack Groupon

Past Projects

- **ReadYourStory** – Sells personalized storybooks that automatically inserts and crops a child's name and photo into pictures in a storybook template
- **Rockit** – Allows mobile-phone users to make some Internet queries through SMS messages
- **Beyhive**– Engage more Canadians in The Bee Cause (crowdsourcing to collect information about bee populations, and educate users on how they can help the cause)
- **Cardio** – Uses video, text, diagnostic probability charts, and self-assessment tests to teach medical students how to conduct five physical exams to diagnose heart-related diseases.
- **InternReviews**– offers a platform where students can publicly share their internship and co-op experiences

Value Propositions of Past Projects

Examples from past projects

- Reduce time to render customized book to less than 15 min
(ReadYourStory)
- Improved performance on standardized physical-exam tests by users (Cardio)
- Users query the internet without needing or using their data plan
(Rockit)
- Scientists gain data on bee sightings and populations; more bees from users' actions to preserve bee-friendly environments (Beyhive)
- Students make better decisions about co-op placement
(InternReviews)

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