



# Goals and Planned Achievements

## **Lecture Objectives:**

- 1) Define the trinity of scope, stakeholders, and goals
- 2) Define stakeholders
- 3) Identify different sponsors for a project
- 4) Explain the concept of a persona
- 5) Develop a persona for a project user.
- 6) Define the goals for a project using a purpose, advantage, and measurement technique

Note: This material is generally from chapter 3 of the textbook

- MSOE is building a new online course submission system. The system will allow students to submit assignments for classes for grading by professors. The system will also allow submitted assignments to be viewed by prospective employers as a portfolio of student accomplishments. The system will also allow assignments to be viewed by ABET evaluators.

## Side note:

- What term from the previous slide should go in the glossary for this project?

ABET: Accreditation Board for Engineering and Technology

# Side Note 2

SE students --

WE NEED YOU (to attend an ABET meeting on Monday, 9/17) . . .

As some of you may know, MSOE's engineering programs are hosting an accreditation visit from ABET, Sunday-Tuesday, September 16-18. These are the folks who put a "seal of approval" on your BSSE degree.

As part of this visit, our SE program evaluator, Dr. James Collofello, has asked to meet with software engineering students (that's you!).

The meeting is scheduled for:

Monday, September 17

4:00 PM (should last less than an hour)

Todd Wehr Auditorium (first floor of the CC building, north end)

I would like to encourage all of you (all grade levels) to attend, if you are able to do so. If you have an SE course at that time (e.g., SE-1011 or CS-2910), it is likely that your instructor will release you for the purpose of attending this meeting.

Don't worry! The evaluator will not likely be giving you a quiz on your software engineering knowledge! He will want to know about your experience in the program and how good a job we are doing to support you in your education as a software engineering professional. I would really appreciate your help with getting a good turnout for the meeting.

Let me know if you have any questions.

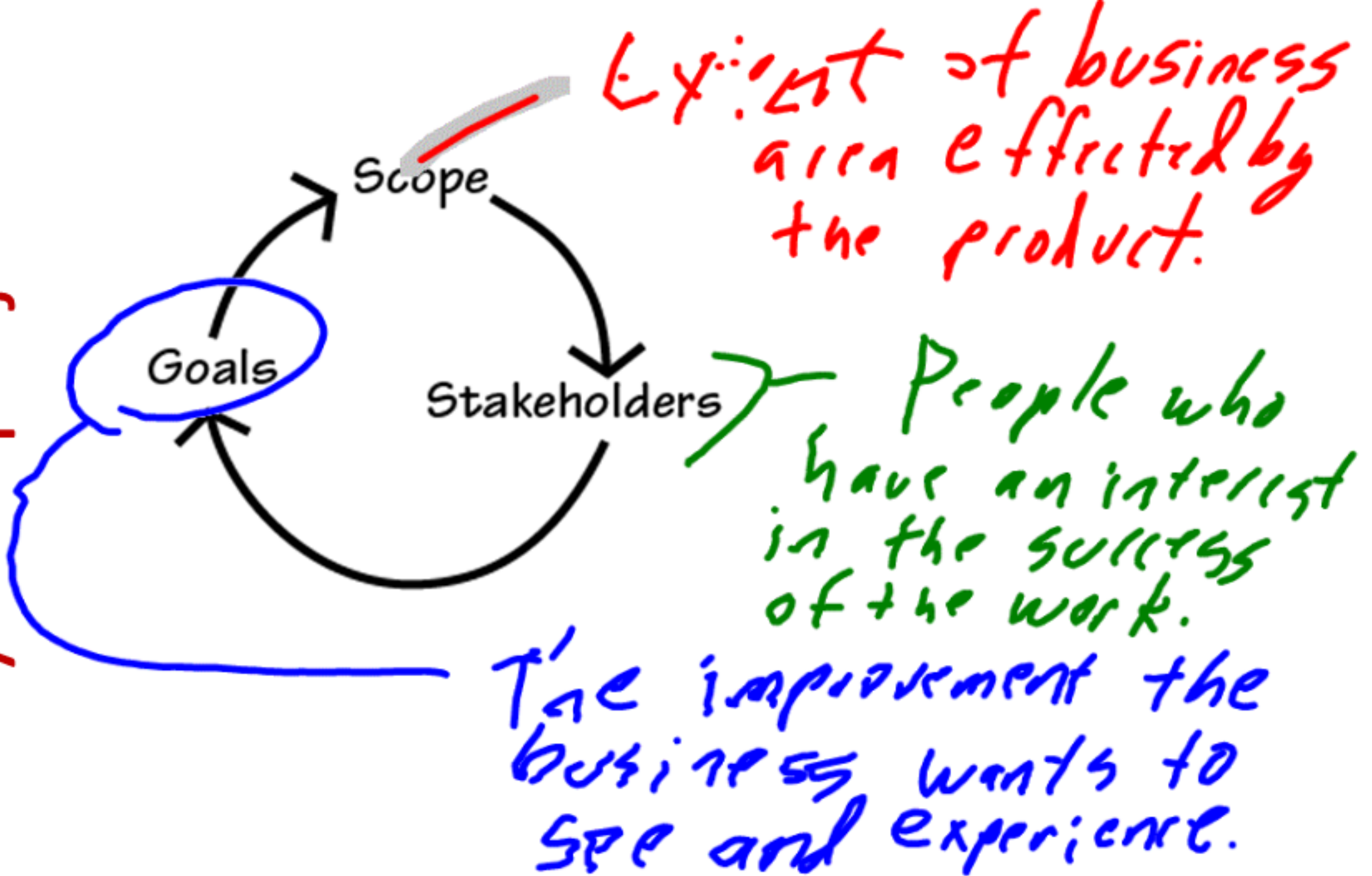
Best wishes.

-- Dr. Sebern

SE3821 Software Requirements and  
Specification



# The trinity of a project





- Anyone with an interest in, or an effect on, the outcome of the product.

# Stakeholders



People / Organizations

SE3821 Software Requirements and  
Specification

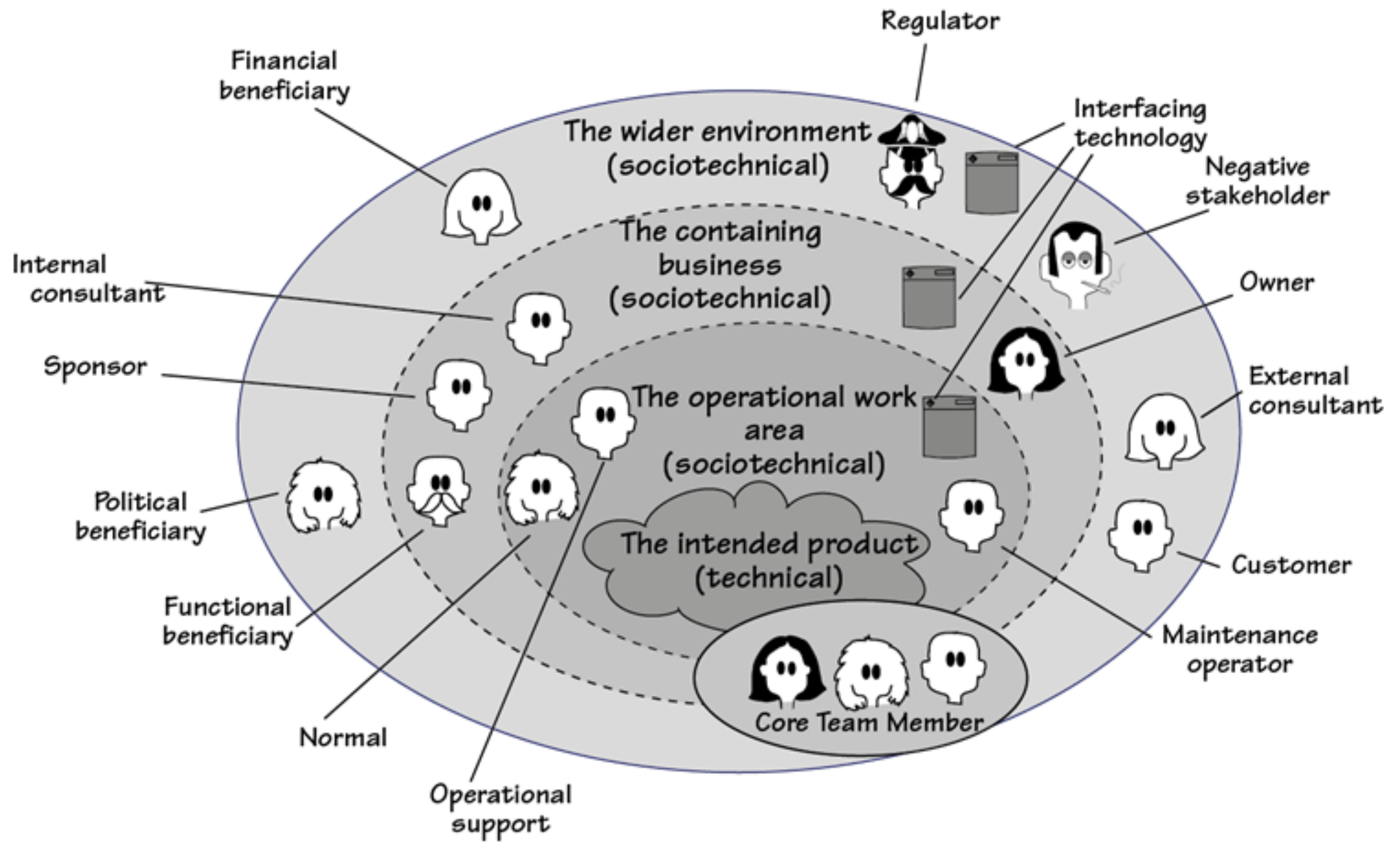
# MSOE Project: Who are the stakeholders?



Students  
Prof's  
ABET  
Employers  
Administration  
IT

Users

# Stakeholder roles





# Sponsor

- This lecture brought to you by the MSOE Software Engineering Program.
- The time of the lecture was sponsored by the MSOE Registrar's office.

The owner of the product. —

The one who is to receive ultimate value. —

The person who is to pay the bills. —

# Turn to your neighbor: Who is the sponsor?

- A product is being build by MSOE students to ensure that appropriate registration occurs. Given a list of courses, a set of instructors, and a list of available classrooms, the system will generate a course schedule that is fair to all students and optimal. Who is the sponsor?

Registrar

<course>  
students

- UP Academics

# Turn to your neighbor: Who is the sponsor?

- A software application is to be built and sold. This application will allow students to text home for money when it is needed. The product is to be sold by a company named Really Useful Software, Inc. Who is the sponsor?

VP of Marketing      ~~Parents~~  
RUSI

- Given our previous system, who might be the sponsor?

EECS department  
VP of Academic Affairs

IT





# Customer

- The customer buys the product once it is developed, becoming the product's new owner.
- Applies even with open source software, even if no one spends money on the software

- Who is the ultimate customer?

IT department?

Dr. Berry in AAffairs

Students  $\Rightarrow$  weak

Profs  $\Rightarrow$  weak

# Users

- The people who are hands on with the system

*Routinely operating on  
the system.*

# Persona

- A virtual person archetypical of most of your users



↑  
Virtual  
Person



- What might a user's persona be?

Age: 18-25

Gender:

Technical Skills: Computer

Literate  
Education: College / HS Graduate

Language: English

Major: Engineering Field

# Other Stakeholders

- Consultants -
- Management
- Subject Matter Experts
- Core Team - *Developers*
- Inspectors
- Market Forces
- Legal Experts
- Negative Stakeholders
- Government
- Etc.

*Someone who wants project to fail.*

# Goals

- What benefit does the project deliver to the stakeholder?
  - Essentially, the highest level requirement
  - Should be written clearly and unambiguously
  - Should be written in a measurable manner to quantify the benefits
- Expressed as
  - Purpose
  - Advantage
    - What will the purpose achieve
  - Measurement
    - How might you measure the advantage



# What are the goals for our MSOE project?

Purpose: Reduce time for profs to return assignments.

Advantage: — More time to teach.  
Better student achievement.

Measurement: All assignments returned by profs in 2 working days.



# Constraints

- Restrictions on the requirements that can eventually appear in the final document
  - A mechanism for providing guidance on where to focus effort during the requirements gathering exercise.
- Examples
  - System must run on a tablet PC
  - System must run under Windows 3.1
  - System must interface with Blackboard
  - System must use Ruby on Rails.

# Estimating Cost

- Many methods
  - Input and output cost
  - Number of business
  - Function Point count



- See textbook for more details
  - Especially Appendix C

