

Announcements

Upcoming assignments/deliverables/quiz

Readings

Ch3, Ch4, Ch5

→ Will only cover some of this material in class.

Should know it for the exam

Plenty of good external web resources.



Project Announcements

Role selection. Have them posted on Slack per information sent by email.



Today

Application Procurement

Next Class

Clarifications on Project

4-up

Risk Dice

Coordinator meetings



Readings

Fowler & Web

We will likely not cover them in class, but know them for the exam.



ERP Procurement

SWEN-343



Agenda

- 1.Lifecycle Management
- 2.Licensing & Ethical Issues
- 3.True Cost & True Benefits
- 4.When to Create & When to buy
- 5.Managing Risk

Some items will tie into your project. Others won't. They are still important to know.



Business Logic Wants Tight Coupling

Removes waste & creates efficiency while
Decreases human error.

Transcription (data entry)

Interpretive mistakes

People make mistakes, computers don't.



ERP Procurement LifeCycle Management

When you need to get new software you can:

- Build or buy

When do you procure software

- Start of project

- During project

Considerations

- Risks

- Cost

- Time (sometimes most expensive)



Initial Checklist

1. Can you afford it?
 - a. \$\$\$
 - b. Time
2. Will it work with existing system (s)?
3. Do you have the technical skillset?
 - a. Or can/should you get it?
4. What will you need to add or remove from functionality?



Licensing & Ethics

Important to stay legal.

Ignorance is no excuse & can get you fired or sued.

Cheaper to stay legal.

It's not your money, but is your job.



Many Different Licensing Types

Proprietary: Can use, but you don't own.

GNU: Open source. Many types.

Concurrent Use: # of simultaneous uses

Site License: Use only at specific site

Perpetual (and non): Expiration date?

Subscription Based: Per user?

License with Maintenance: Maintenance included

Many more...



Considerations for Your Project

What you select affects others

You are part of a larger process

Changing won't be easy

A minute of planning is worth an hour of coding

Coupling is key



Do You Know The Actual Cost?

Cost is not just \$\$\$

Time

- Development time

- Integration time

Maintenance

Risk

- Peace of mind can be valuable

- Risks usually happen

- Risk exposure = probability x impact



Surgeons Want to Cut & Developers Want to Develop

Expensive existing items are often cheaper

You have them now

Already tested (hopefully)

Functional

Security



Everything Starts With a Plan: Procurement Plan Document

Deliverables to be procured by proposed agreements/contracts.

Effective resource management strategies for negotiating and managing the agreements/contracts.

The need for staged delivery and desirability of testing the procured items before introducing them into the implementation process.

The chosen procurement method (payments, expressions of interest, request for price/quote, request for tender).

Key stages of the process for selecting suppliers and vendors.

The model of procurement funding.

The sample of procurement contract/agreement.

References to quality approvals, quality assurance and risk management.



Five Major Procurement Process Steps

1. Specification
2. Selection
3. Contracting
4. Control
5. Measurement



Specification

What do you need & don't need?

What is necessary and nice to have?

What is the actual cost?



Selection

Considerations

What support do they have?

What has their track record been like?

Vulnerabilities?

Ongoing support?

Which of their needs do they meet & not meet?

Easy to learn and modify?



Contracting

Clearly specify delivery dates and cost

List all items

Detailed schedule

Obviously not all that useful for your project.



Control (of)

Delivery and payment process
Q/A to ensure quality & deadlines

While you won't necessarily do this for your project, reflection is good
When to cut ties and when to stay
How to ensure that other teams are doing what they should



Measurement

Performance indicators and measures for assessing the effectiveness and success of the entire process.

Common performance indicators (pi):

- Adherence to product specifications

- Meeting KPIs (Key performance indicators)

 - Specific to business domain

- Deadlines & costs met?

- ROI

Good reflection activity for your project

- Plan on including this in your reflection document



Common Mistakes

Don't factor in the actual cost

Old Windows vs. Linux Debate

Tightly coupled with rest of system

Updating will be difficult

Changing to new module will be tough

Testing

Just because you bought it, doesn't mean you can edit it.



Recap

5 Steps of procurement process

1. Specification
2. Selection
3. Contracting
4. Control
5. Measurement

What types of measures for cost?

Dollars

Risk

Time

What are some different types of licenses?

Proprietary

GNU

Concurrent Use

Site License

Perpetual (and non)

License with Maintenance



Project Activities (upcoming)

4-up

We'll normally be looking for this from each team

Risk Dice

Coordinator meetings



Initial Considerations

How to use version control?

Come up with a common plan & milestones.

Large risks & ways to overcome them.

